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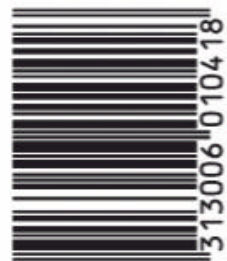


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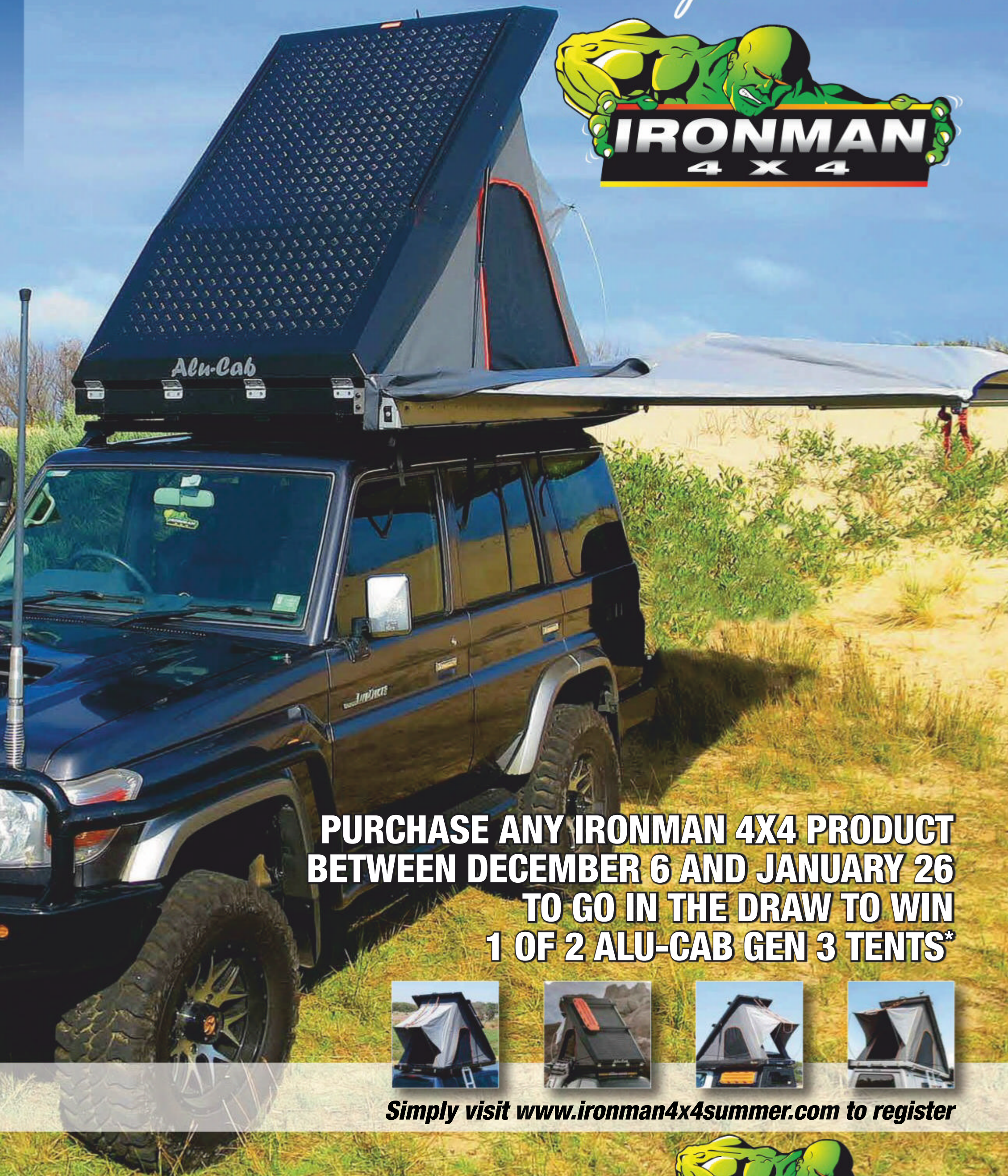
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4X4
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4WORD

MATT RAUDONIKIS

GOOD THINGS IN SMALL PACKAGES

ON THIS page last month I was still on a buzz after driving the two-door short wheelbase Wrangler alongside the Suzuki Jimny. It was good fun driving these little'uns in the bush, and I queried if there's a place in the market for other variants of these once-popular vehicles, like the Land Rover Defender 90 and the Mahindra Roxor.

Well, since then stories have been doing the rounds about Jeep, Land Rover and Ford all working on Jimny-sized variants of their respective Wrangler, Defender and Bronco models. While that sounds great to me, the reality is these new vehicles are most likely to be soft-road SUVs and not the off-road vehicles they take their names from. I hope the manufacturers prove me wrong, but I doubt it.

This begs two questions: Does applying these iconic off-road nameplates to non-off-road SUVs dilute the brands? And is the new Defender a true Land Rover and worthy of the nameplate?

When you think that Land Rover has been selling vehicles like the Evoque for a while now and is working on a low-riding station wagon, then you have to say that the once all-4x4 brand is well and truly diluted from its roots. Jeep has the Compass and the Renegade (no longer on sale in Australia), so the American brand isn't innocent of

making city-based SUVs either.

As for the new Defender, we'll know more about it when we drive the vehicle later this year, but it's been more than three years since Land Rover built a new vehicle with a live axle and the new Defender will follow this trend. Land Rover is claiming this car is its most capable 4x4 ever and I'm sure that's true; however, it won't have the feel and character of the old Land Rover that so many people love.

Which brings me back the Mahindra Roxor; a great little 4x4 with all the ability and character you could ever want. Unfortunately, it doesn't have the safety or necessities to ever make it roadworthy in Australia (or the USA, where it is assembled and sold) but it is a great little off-roader.

I was lucky enough to be with our US-based man Chris Collard as we chased the little Roxor south through Baja in the Mexican 1000 back in May, and I was truly impressed by its ability. It wasn't the fastest vehicle in the field by a long shot, and driver Ned Bacon knew that, but as reported in the story on page 98 of this issue, it kept on keeping on and finished the gruelling rally ahead of many faster cars that fell by the wayside. Just like so many old Jeeps and Broncos have before it.

Matt



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4X4 AUSTRALIA MAGAZINE IS PROUDLY PRODUCED AND PRINTED IN AUSTRALIA

Our vehicle testing is conducted at the Melbourne 4x4 Training and Proving Ground, near Werribee, Victoria.
www.melbourne4x4.com.au

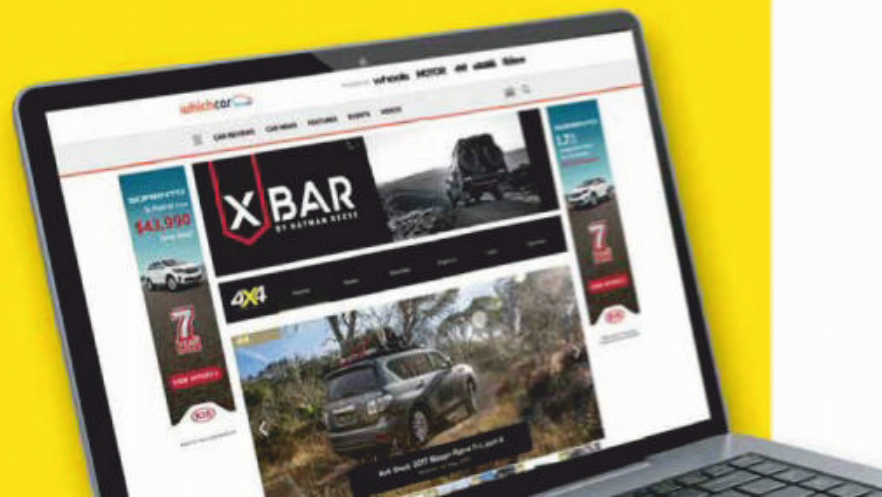


ISSN 0726-2418

CHECK OUT OUR WEBSITE

VISITORS to our digital space at 4x4australia.com.au will notice our homepage resides at whichcar.com.au/4x4australia.

All remains the same, with up-to-date news stories, in-depth new-car analysis and insane custom write-ups. We'll also tick more travel items off our bucket-list, and continue to bring you the best aftermarket product advice from gear manufactured here and abroad. Alongside our 4x4-related content, you'll also be able to find the best of motoring on the new website, with our sister magazines *MOTOR*, *Street Machine* and *Wheels* all just a convenient click away.



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4CAST

NEWS AND VIEWS

JEEP LINE-UP TO BE ELECTRIFIED BY 2022

JEEP CLAIMS IT WILL BECOME THE GREENEST SUV BRAND IN THE WORLD WITHIN FIVE YEARS.

FCA (Fiat Chrysler Automobiles) has announced that the full line-up of Jeep vehicles will be electrified by the year 2022.

The Australian line-up includes all of its SUVs ranging from the Compass, Cherokee, Grand Cherokee, Wrangler and the new Gladiator pick-up truck, which goes on sale in quarter-two of 2020.

Globally, the EVs will also include the compact Renegade SUV, which

is no longer sold in Australia; the seven-seat Grand Commander, which is sold exclusively in China; the yet-to-be-released Wagoneer and Grand Wagoneer large SUVs; and the next-generation Grand Cherokee. All of these vehicles will offer either PHEV or BEV variants in addition to internal combustion powertrains by 2022.

Speaking at a Jeep drive event in New Zealand this week, Jeep Global President Christian Meunier said Jeep

would be, “the greenest SUV brand in the world.”

Meunier went on to also say that the electrified Jeeps will be, “the best Jeeps ever” and that they would be the most capable as well as being the fastest Jeep models.

The Jeep EVs will form part of a grand expansion plan for the Jeep brand worldwide.

Over the last 10 years Jeeps global sales have increased five-fold from



EV JEEP

WITH electrification, Jeep claims its vehicles will be the most capable and fastest Jeeps ever.




WORDS MATT RAUDONIKIS



JEEP PRESIDENT CHRISTIAN MEUNIER SAID JEEP WOULD BE “THE GREENEST SUV BRAND IN THE WORLD”

300,000 units in 2009 to 1.5 million in 2019, and Meunier sees that growth continuing with new models and powertrains. This impressive sales growth has not been matched in the Australian market, however, with the brand selling 4193 units locally in 2009 and projected to sell 5622 units in 2019 – a more modest increase of around 34 per cent over the same 10-year period.

Nevertheless, sales could be boosted by the introduction of the 2021 Jeep Grand Cherokee, which is expected to be revealed toward the end of next year and is tipped to ride on a platform derived from an Alfa Romeo product. It will be bigger than the current generation Grand Cherokee and is expected to include a three-row, seven-seat variant. Jeep Australia's new Managing Director, Kevin Flynn, said he would be very excited to see such a model here, while not actually confirming its existence. “I think a seven-seat Grand Cherokee would do very well in Australia,” he exclaimed. 

WORDS TRISTAN TANCREDI

BIGGER IS BETTER

THE 2019 CUSTOM 4X4 OF THE YEAR IS BIG, BRASH AND PULLS NO PUNCHES.

JAMIE Facer's mammoth F-250 proved once and for all that bigger is definitely better in the eyes of our readers, with the 2017 F-250 Platinum winning our Custom 4X4 Of The Year poll for 2019.

The burly pick-up clinched the gong ahead of Max's tidy N80 Hilux by 130 votes, with another Toyota – Matt Szczesny's 200 Series – rounding out the top three.

The tinkered F-truck, meticulously crafted by Jamie Facer of Allsafe Mine Vehicle Equipment (AMVE 4x4), pulls no punches, which certainly helped when it came time to vote.

Powered by Ford's well-known 6.7-litre Power Stroke V8 engine, the F-250 comes from the factory floor as an already-capable 4x4 tourer (after the import and conversion companies play their part, of course), but that didn't stop Jamie from going to town on the big rig.


A quick glance at the canopy reveals AMVE 4x4's handiwork, with the epic

set-up perfectly suited to remote touring – toolboxes, copious storage, an MSA 4x4 fridge slide, an Engel fridge and a complex electrical fit-out, to name a few.

This example stands four inches taller than stock thanks to King Off-Road Racing Shocks coil-overs up front and a set of standard rear springs out the back (with an additional leaf), as well as Airbag Man airbags and another pair of King Shocks.

Other features include LED lighting, two Warn winches, that schmick Road Armor front bar, Bushwacker flares, and a Rhino-Rack Pioneer platform. The vehicle rides on Fuel 18x9-inch wheels wrapped in Mickey Thompson MTZ P3s.

Those who voted in the Custom 4X4 Of The Year competition entered the draw for a chance to win a Maxxis Tyres Australia voucher valued at up to \$2000.

To see who won, and to read our complete write-up on the Custom 4X4OTY-winning tourer, visit www.whichcar.com.au 

BIG EFFIE

JAMIE Facer's F-250 picked up the most votes in Custom 4X4OTY to take out the gong, and this off-road weapon is a well-deserved winner.



AAAA INTRODUCES THE AIC IN MELBOURNE



THE Australian Automotive Aftermarket Association (AAAA) moved into a brand-new headquarters at the end of 2019 and in doing so marked the opening of the Auto Innovations Centre (AIC). The AIC is modelled on the SEMA Garage in the USA, where members are able to access testing and data on a range of vehicles to make developing and testing new products for them simpler and more affordable.

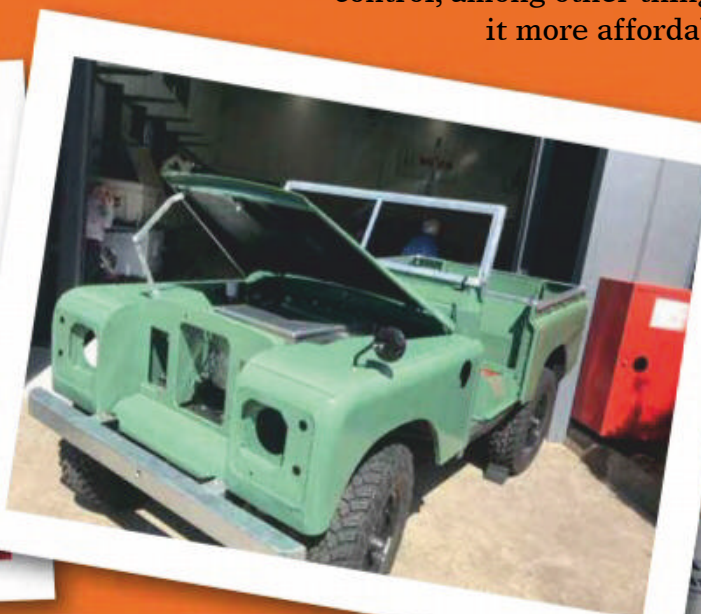
“Our primary function is to assist the Australian automotive aftermarket companies to compete in Australia and internationally,” said AAAA chief executive, Stuart Charity, at the opening.

To be operated by the AAAA, the AIC is backed by some of the biggest names in the automotive aftermarket industry.

Four-wheel drivers will recognise the likes of ARB, Harrop, Terrain Tamer, Pedders, Redarc, Repco and Airbag Man among others, plus a number of performance-oriented companies.

The AIC facility is located in the south-east suburbs of Melbourne and a second facility will open in Adelaide in 2020. If you are wondering why Melbourne and Adelaide, these are the cities most affected by the closure of Australia’s auto-manufacturing industry and government funding for the facilities was directed to these cities.

The AIC will be able to assist AAAA member companies with things like 3D scanning of vehicles and components, testing of ESC operation for modified suspension systems and calibration of safety systems such as AEB and radar cruise control, among other things. Having the facility should make it more affordable and easier for the companies to bring their products to market. **4x4**



FROM LEFT: 4x4 suspension testing will be part of the AIC’s work; EV-converted Land Rover is Aussie innovation at its best.

BELOW (L-R): Brent Hutchinson, Belinda Wilson (Frank’s daughter), Dianne Hutchinson (Frank’s wife) and Frank Hutchinson.



TERRAIN TAMER TURNS 50

TERRAIN TAMER THROWS ONE HELL OF A PARTY TO CELEBRATE A SIGNIFICANT MILESTONE.

TERRAIN Tamer celebrated its 50th anniversary in December by throwing a shindig at the Hotel Windsor in Melbourne. Held in the Grand Ballroom, the iconic aftermarket manufacturer invited 150 of its staff, suppliers and customers, as well as a contingency of media, to celebrate the company’s milestone.

The proud Australian company traces its humble roots back to 1969, when the late Don Kyatt and Frank Hutchinson (the current managing director) started the business in Moorabbin, Melbourne. Terrain Tamer remains family owned to this day, with Frank’s son Brent becoming general manager in 2018.

Fifty years later and the brand’s extensive network supplies

more than 40,000 4WD parts to customers located in more than 80 countries around the world, catering for a broad range of industries including workshops, mines, farming, emergency services and recreational drivers.

A coffee table book called *The Terrain Tamer Journey – 50 Years in the Making* was also unveiled at the lavish party and gifted to those in attendance. The book looks back at the company’s rich history by paying homage to the key moments, people and innovations that have made the Terrain Tamer brand a household name around the country.

To pick up a copy head to: www.terraitamer.com **4x4**

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ALL THE LATEST 4X4 NEWS AND EVENTS



PARRTJIMA – A FESTIVAL IN LIGHT (NT)

Now is the time to plan a trip to the Red Centre, and if you find yourself in Alice Springs between April 3 to 12 you'll catch the brilliant Parrtjima Aboriginal light festival. Set against the majestic MacDonnell Ranges, this free annual festival takes over Alice Springs with 10 nights of light installations from a number of Aboriginal artists. There's also a programme of live talks, events and music by local and national musicians. See: www.parrtjimaaustralia.com.au

TOYOTA COUNTRY MUSIC FESTIVAL TAMWORTH (NSW)

Fans of country music need to head to Tamworth for the famous Country Music Festival, which runs from Friday January 17 to Sunday January 26. Each year the music festival attracts more than 300,000 visitors across 10 days, with more than 700 artists featured in 2800 scheduled events across 120 venues. The pinnacle of the event is the Golden Guitars, which will be held on the second Saturday. As well as music the town will come alive with entertainment and activities for the whole family. For a full line-up of musicians, more information and accommodation options, check out: www.tcmf.com.au

ISLAND GETAWAY (TAS)

There's plenty happening in Tasmania over the summer months, so head to www.spiritoftasmania.com.au and book your four-wheel drive on the ferry to the Apple Isle. As well as events around Australia Day including Gin-uary Hobart (January 25), A Day on the Beach (January 26), Henley-On-Mersey (January 26) and Vineyard Camping at Clover Hill (January 25 to 27), there are plenty of natural wonders to see including the blooming leatherwood and flowering lavender. For more details and suggested self-drive itineraries, check out: www.discovertasmania.com.au/what-to-do/events

ARB ELDEE EASTER FESTIVAL (NSW)

Eldee Station has announced the dates for the 2020 ARB Eldee Easter Festival. The fun 4x4 event will take place over the weekend of April 10 to 12 and, as well as four-wheel driving tests on the award-winning station's myriad tracks, there will be plenty of activities for families including the traditional Easter Egg Hunt, a fireworks display over the Mundi Mundi Plains, a tagalong tour, a charity auction and live music. Accommodation options include rooms and powered or unpowered campsites. Head to: www.eldeestation.com to view the full event schedule or to make a booking.



ANNUAL NGARKAT CP WORKING BEE (SA)


Every year a group of volunteers from 4WDSA affiliated clubs meet at the Ngarkat Conservation Park to work on the Border Track, maintaining and/or repairing matting and fencing, cleaning up fireplaces and rubbish, trimming vegetation, and more. This year the working bee is scheduled for March 28 to 29, with volunteers to meet at Ngarkat CP Pine Hut Soak campground (S35° 25' 24.7" E140° 52' 46.2") at 8.30am on Saturday for a 9am start. If you and your club are keen to help out, email Darryl McManus at ddaajmcm@bigpond.net.au or visit: www.4wdsa.asn.au/?page=ngarkat

VICTORIA'S ICONIC 4WD ADVENTURES (VIC)

So you want to check out the High Country Huts but you're not sure how to get there? Not a problem thanks to 4WD Victoria, which has some great resources on its website under the heading *Victoria's Iconic 4WD Adventures*. As well as the High Country, there's plenty of detail on areas including the Otways, Murray River Red Gum, Mallee Country and The Grampians. Info includes the history of each area, a general description, tips and advice, track gradings and detailed maps. Visit: 4wdvictoria.org.au



HIGH COUNTRY HUTS (VIC)

Summer is a great time to head to the Vic High Country and explore the region's historic huts. Originally built by the cattlemen to use as shelter when driving their cattle up to the plains in summer, some still stand while others have since been destroyed by fire and rebuilt. These days the huts are popular with four-wheel drivers seeking cover when the weather turns foul. Search for 'Cattlemen Huts' at: www.victoriashighcountry.com.au 



BULLDUST

DEAN MELLOR

TRICKLE-DOWN SAFETY

AMATE OF mine, and sometimes 4X4 Australia contributor, David Morley recently wrote an opinion piece for *MOTOR* magazine blaming, in a roundabout kind of way, the increase in the road toll on the rising popularity of dual-cab utes over conventional cars.

Dave pointed out that the road toll in Victoria was up by 26.3 per cent for the first 11 months of 2019 compared with the same period in 2018. He then questioned the government's repeated and unfounded claims that speed is to blame for much of this increase. However, as there have been no increases to the speed limit in that period and no real deterioration in the state of the roads – and as many level crossings in the state have been removed – there should have, in theory, been a reduction in the road toll over the period. Dave also points out that drivers are no more talentless than they've ever been, so that can't be the reason either.

So, what's going on? Dave surmises that vehicles must have become "less life-saving".

This argument seems counter-intuitive because cars are said to be safer than ever before. Dave, however, is not referring to crash-worthiness, but to dynamic safety, and he goes on to argue that the growth in popularity of dual-cab utes has therefore skewed the road toll. "Utes – actually, let's call them light-trucks, for that, thanks to their ladder-chassis construction and compromise tyres, is precisely what they are – just don't have the dynamics of a conventional car," Dave writes.

Having driven pretty much all of the dual-cab ute models sold in this country since 1994, I can only agree with Dave's assessment – dual-cab utes certainly don't have the dynamics of well-engineered, modern, conventional passenger cars. Most utes are generally heavier, have a higher centre of gravity, have higher-profile and often Light Truck construction tyres, have rudimentary live-axle rear suspension with leaf springs, and run rear drum brakes. In addition, their ability to haul up to a tonne in cargo means there are some pretty major ride and handling compromises when they are either fully unladen or,

conversely, loaded to the hilt. Sure, not all conventional cars are the last word in on-road dynamics, either, but as a general rule most cars offer better dynamics than most utes on the road.

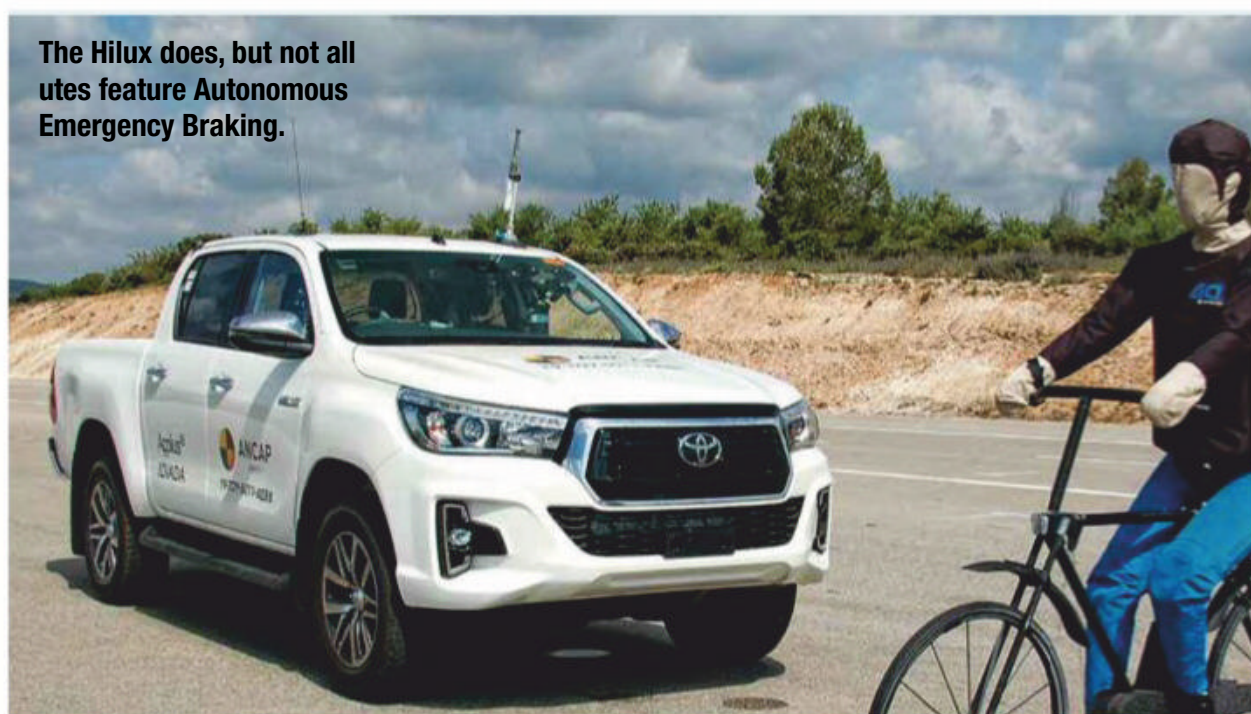
Dave also points out that "utes have been late to the autonomous braking (and other safety tech) party", and this point is of great importance. Utes definitely have been late to the safety tech party, with passenger cars and 4x4 wagons equipped with technology such as electronic traction control and vehicle stability control much earlier than utes. As for AEB, forward collision alert, lane-departure warning and adaptive cruise control, this kind of tech is only now starting to filter through to utes, while many passenger cars have had this kind of tech for some time.

Of those utes that are equipped with the latest safety tech, they are no doubt more 'life saving' than ever before, because if you can avoid a crash in the first place then you're not going to contribute to the increase in the road toll. Of the modern utes equipped with stability control and AEB (Ford Ranger, Mercedes-Benz X-Class, Mitsubishi Triton and Toyota Hilux), I reckon you'd be hard pressed to crash them, except through complete inattention or sheer stupidity. Throw one into a corner too hard and the stability control will generally ensure you don't lose control. Forget to put your

foot on the brake when the car in front stops then hopefully the AEB will save your bacon. And over the next few years advanced safety tech like this will no doubt become the standard in all 4x4 utes.

Dave told me his column caused quite a stir among many who read it, with many ute owners leaping to the defense of their vehicle of choice; but regardless of how much electronic cleverness is thrown at utes, while they run old-school chassis architecture, suspension and brakes, they're still not going to be as dynamically sound as equally equipped conventional cars. But, hey, neither are most 4x4 wagons ... and if you want a vehicle that's capable on the road as well as off it, then there will always be compromises. Of course, most enthusiast four-wheel drivers are aware of this and will drive their vehicles accordingly, but for those with less of an appreciation of the vehicle they are driving, we can only hope vehicle manufacturers start adding the full suite of new safety tech to utes as soon as it becomes available, rather than trickling it down from luxury cars to family cars to 4x4 wagons and lastly to utes.

P.S. Dave has been invited to a meeting with the folk at ANCAP (Australian New Car Assessment Program) to discuss some of the points he raised in his *MOTOR* column. If anything relevant comes out of it, we'll let you know. **4x4**



**NEW
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When not towing, large towing mirrors permanently protruding off the sides of the vehicle become impractical. MSA 4X4's Towing Mirrors feature a large single mirror that pivots on an extremely heavy-duty extension slide, that allows the mirror to be returned to its normal "non-towing" position to avoid the extended mirrors permanently protruding way off the sides of the vehicle! Key to the design of these new MSA 4X4 Towing Mirrors was a mirror that when not towing, was not disproportionate to the styling of the vehicle and matched the size of the vehicle.



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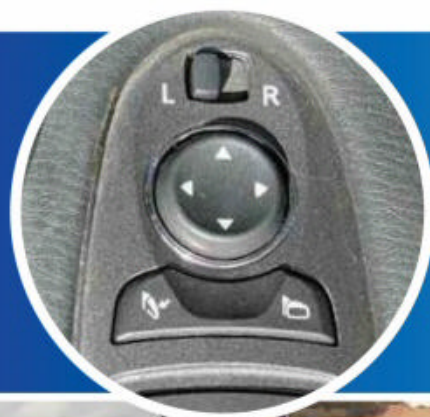
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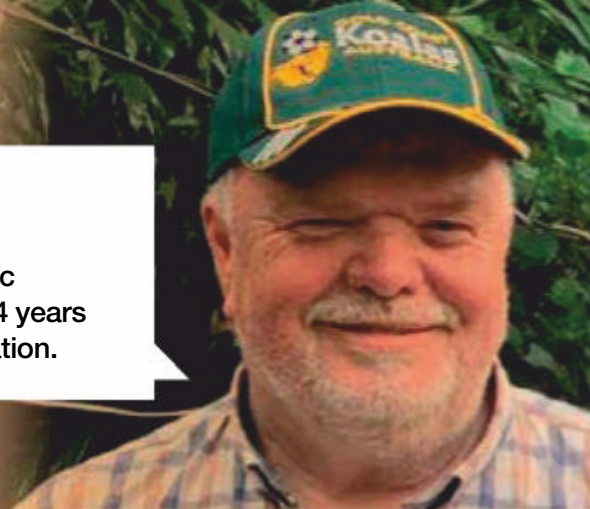
A COOL AUSSIE ADVENTURE.

MEET THE EXPERT

Name: Andreas Bischof

Role: Director, Leisure-Tec

Experience: More than 24 years working in mobile refrigeration.



ANDREAS BISCHOF'S LONG CAREER IN PORTABLE REFRIGERATION HAS LED TO THE CREATION OF THE myCOOLMAN BRAND OF INNOVATIVE CAMPING FRIDGES.

COMING from the small town of Munster in Germany, and having studied business and finance, in 1996 I moved to the big smoke of Emsdetten and took a job at Waeco as CFO. Six short years later the founder of Waeco, Theo Waehning, gave my family and I the opportunity to move to the sunny Gold Coast of Australia to assess the current business opportunities of the local market. Somehow a 'short' three-year stint to examine the local market ended up as a life-changing experience.

In early 2016 I decided to call it quits. After 20 years of working in the 4x4 and lifestyle industry, it was finally time for me to find my next adventure ... retirement. As one can only play so many rounds of golf before becoming the next Tiger Woods, retirement proved much slower than I had thought. Over a few quality German beers, Theo also let slip that he was struggling with retired life, and he too needed a project, so we thought we would let our passion for the RV and 4x4 industry fly once again.

We both knew our expertise was in one specific area, so we decided to give it our all and started discussions about building a new portable fridge/freezer that would

be packed with innovative features – and so myCOOLMAN was born.

Having been off-roading on Fraser Island a fair few times, camping with our kids at horse events, and fishing out at sea with the family, I envisioned something that was durable, functional and, most importantly, innovative. We thought of any and all possible features that people would look for and want in a portable fridge – something where power shorts are no longer an issue and, of course, a bottle opener. I am many things but skilled at opening a beer with a teaspoon is not one, so a built-in bottle opener was definitely a top priority!


We wanted a portable fridge that could handle anything you could throw its way; one that's tough and rugged for the Aussie bush. But most of all we wanted to change the way people used their portable fridges – our thinking was, 'how can we revolutionise the industry?'

It was this thought process that led to the birth of the newly released myCOOLMAN Power Pack, which is by far the most exciting product design and development process I have been involved in over my entire career. It has given way to a whole new range of opportunities in

the 4x4 industry. Finally, adventurers can truly explore off the beaten track and not be dependent on their vehicle or a heavy cumbersome product for power and, most importantly, for a cold one at the end of the day.

Without a doubt, myCOOLMAN has become everything I've ever wanted in a camping fridge. Having Theo's unwavering knowledge of compressors and all things technical has enabled myCOOLMAN to build the best compressor and fridges the market has ever seen. Together with our years of experience, we were able to create and release an entire range of portable fridges in one hit (which no one has ever done before) – seven fridges in the beginning, to be precise, which has now quickly become 10.

Releasing our very own fridge onto the market was one of the most nerve-racking and exciting few months I've ever experienced, but, having the continuous support of lifelong business partners who have become friends, the business and our products have been met by the local and global industry with open arms.

We hope you love and enjoy our myCOOLMAN products as much as we do. Happy adventuring! 

COOL POWER

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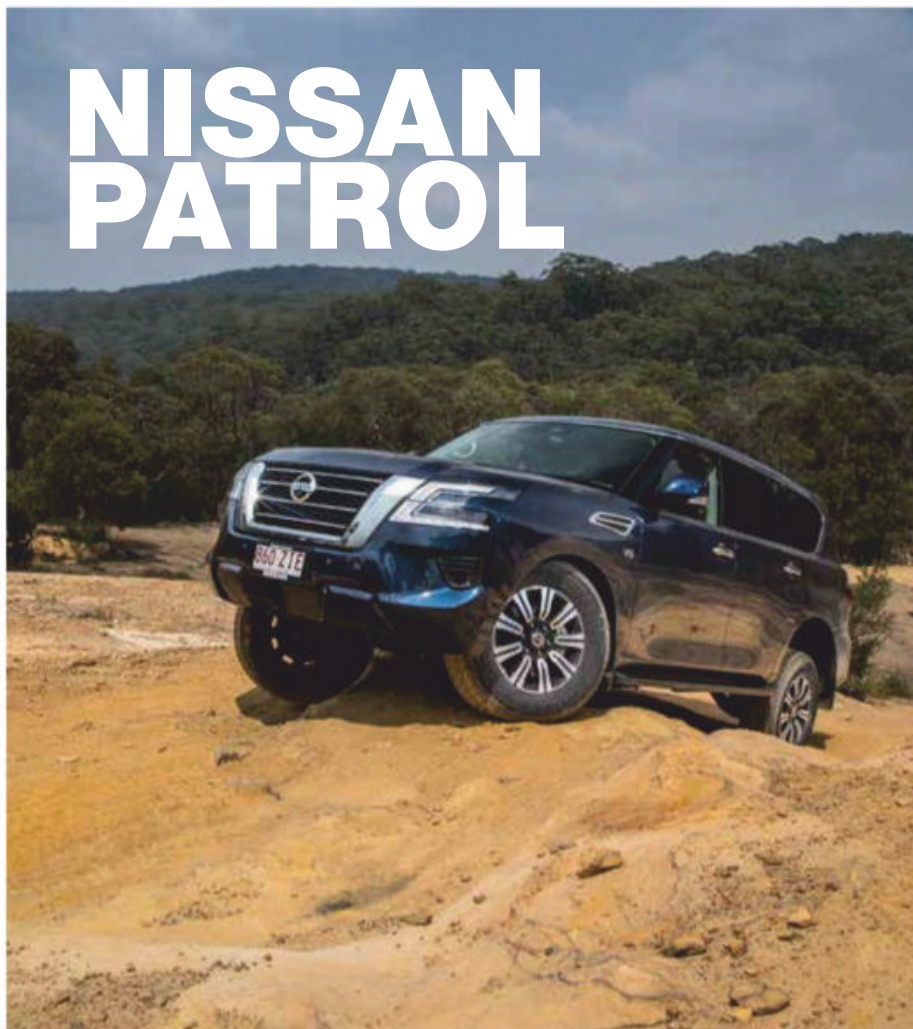
VISION

WORDS FRASER STRONACH



NEW 4X4s FROM LAND ROVER, JEEP, NISSAN, ISUZU AND MOST LIKELY TOYOTA AND MAZDA WILL HIT THE SHOWROOMS IN 2020. HERE'S A RUNDOWN ON WHAT TO EXPECT...

NISSAN PATROL



NISSAN'S Y62 Patrol has been around a surprising 10 years now (eight in Australia), but somehow still seems new, perhaps because of its still-ahead-of-the-game high-tech suspension.

For 2020, all the Y62 basics, including the trick suspension and thundering V8 remain, but there's new safety tech galore, especially on the less expensive of the two models, the Ti.

It gains radar cruise, lane-departure warning/intervention, and blind-spot warning/intervention. The Ti and the Ti-L then gain automatic emergency braking, forward collision warning and rear cross-traffic alert. New colours, distinctive new front and rear styling, and some seemingly unnecessary fiddling with high-speed damper response complete the 2020 overhaul. And while prices have drifted north by \$2000 to \$3000, they still remain well south of what Toyota asks for its LandCruiser 200.

What you don't get with the Patrol is, of course, a diesel engine, but the Patrol's 5.6-litre petrol V8 is a cracker; energetic, urgent and free revving, it brings performance aplenty despite Patrol's notable size. And while thirsty if you dip into the power on offer, light-throttle cruising can be surprisingly thrifty. Either way, the 140-litre tank ensures you don't run out of petrol too often. And all this performance isn't lost on a chassis that offers near physics-defying on-road handling with flat cornering and a supple ride thanks to fully independent Hydraulic Body Motion Control suspension. Off road, the active hydraulic rams and the lack of suspension-travel restricting swaybars provide excellent wheel articulation, even if a bit more ground clearance would be handy.

NISSAN NAVARA N-TREK WARRIOR

Warrior's re-engineered suspension provides much improved ride and handling.



MORE significant than the new Patrol for Nissan in 2020 is the new 'hero' model in the Navara range in the form of the N-Trek Warrior. The Warrior builds on the Navara N-Trek, but where the N-Trek is merely an exercise in styling enhancement, the Warrior is an exercise in chassis engineering. This is performed locally by Premcar, the current embodiment of the Prodrive, Tickford, FPV dynasty, so has proven expertise and experience to call upon.

Aside from new springs, dampers and wheel/tyre package that headline the Warrior's upgrade, there's also a bespoke steel front bar, stainless steel underbody protection, an LED light bar and various styling enhancements. Premcar will manufacture the Warrior in Melbourne and it will be sold through Nissan dealers with full Nissan factory warranty.

The chassis changes have brought 40mm more lift, 25mm of that via the taller 275/70R17 Cooper Discoverer light-truck all-terrains, while the extra wheel offset has increased wheel track 30mm to 1600mm at both ends. Lighter initial springs rates but firmer secondary rates, the front via an extra long progressive rubber bump stops, are matched with more substantial Tenneco dampers specifically valved by Premcar's engineers.

We have driven it and it works. On the road the ride initially feels firm, no doubt due to stronger compression damping and despite the softer initial springs, but the faster you go the better it feels. So good in fact that every Navara should have this sort of expertise directed at its suspension. Off-road, the larger diameter, more robust and more aggressive tyres and the extra clearance both combine to take the Warrior to an off-road competence level that a standard Navara can only dream about. The Warrior carries over a standard Navara powertrain and will be offered with both six-speed manual and seven-speed automatic gearboxes.

LAND ROVER DEFENDER

FOUR years have passed since the last of the 'old Defenders' ended 67 years of continuous production of a line of 4x4s that evolved from the original 1948 Land Rover.

What will appear as the Defender in 2020 bears no resemblance to the past and is very much a product of today. No separate chassis and no live axles, the new Defender couldn't be any more high-tech with its largely aluminium monocoque construction and fully independent suspension.

The good news is the Defender has been developed from

the current Discovery platform, which in turn was developed from the current Range Rover/Range Rover Sport platform that debuted in late 2012, so it has provenance. It will be initially available in Australia in a number of spec levels with lots of equipment options but only as a '110' four-door wagon. A two-door '90' will follow, possibly in 2021.

Australian buyers can choose from two four-cylinder 2.0-litre bi-turbo diesels (147kW and 177kW) or a supercharged and turbocharged 3.0-litre straight-six petrol engine with a sizzling 294kW and an energy recouping 'mild hybrid' system.

All Australian models will have an eight-speed automatic gearbox, dual-range full-time 4x4 and height-adjustable air suspension. Wheel sizes start at 18-inch and Land Rover promises the new Defender will be the most off-road capable Land Rover ever. We can't wait!



JEEP GLADIATOR

GIVEN the popularity of pick-up trucks in North America and utes just about everywhere else in the world, it's no surprise Jeep has developed the Gladiator. It's actually not the first time that Jeep has made a pick-up or ute and it's not the first time that the Gladiator name has been attached to the same.

While it looks like the Gladiator is a Wrangler with a tub on the back, the wheelbase has been extended and the five-link rear suspension adapted from the Ram 1500 pick-up to give it a bigger payload and towing capacity than the Wrangler. However, with a payload of just 620kg and a tow rating of 2721kg it's still well down on what the popular dual-cab utes offer. The Gladiator does have live axles at both ends, though, which will

distinguish it from all of the popular utes here bar Toyota's LC79, and will help off-road.

Initially, the familiar 3.6-litre petrol V6 from the Wrangler will be offered with an eight-speed automatic gearbox, and if we do see a diesel down the track it may be the 3.0-litre V6 diesel from the Ram and Grand Cherokee rather than the 2.2-litre four-cylinder diesel in the Wrangler.

Overland and Rubicon models will be offered, the latter with bits from the Wrangler Rubicon: front and rear lockers, front swaybar disconnect, lower axle ratios and a lower transfer ratio. It appears as though the Gladiator will get a full-time 4x4 mode in both of the two transfer cases on offer.



ISUZU D-MAX

ALSO slated for a mid-year release is the next-generation D-MAX, which unlike the current D-MAX is not a result of a joint venture with General Motors. This new D-MAX is in fact an Isuzu from the ground up, which is the way that Isuzu has historically gone about designing its own utes.

The 2020 D-MAX is bigger overall than the current model, no doubt to compete with the big utes like the Ford Ranger and Volkswagen Amarok. The 2020 D-MAX also will be better equipped and seemingly more passenger-car like in presentation and detail compared to the more commercially flavoured current model. At the same time, more wading depth and a standard rear locker suggest more 4x4 ability; although, the true benefit of the locker will depend on how it is integrated with the electronic traction control as some lockers switch off the ETC across both axles, so don't bring much benefit.

Significantly, the 2020 D-MAX will be powered by a slightly tuned-up (140kW/450Nm vs.

130kW/430Nm) version of long-serving 3.0-litre four-cylinder diesel currently used, presumably backed by the current six-speed Aisin automatic and six-speed Isuzu manual gearboxes.

While a smaller (1.9-litre) bi-turbo and Euro 6 compliant diesel is offered elsewhere, it's unlikely to come to Australia until Euro 6 does. If and when Euro 6 comes into play, Isuzu may still prefer to fit selective catalytic reduction technology (AdBlue) to the 'big' 3.0-litre four.

New features on the D-MAX include electric power steering, tilt-and-reach steering wheel adjustment, auto headlights and wipers, and Apple CarPlay/Android Auto. Rear cross-traffic alert and blind-spot warning also become standard features.

The Thai reveal of the 2020 D-MAX didn't mention AEB, but that could well make it onto Australian models.

The 2020 D-Max has been developed exclusively by Isuzu. The pictured image is the Thai-spec model.



MAZDA BT-50

MAZDA isn't giving anything away right now but a new BT-50, with ties to the 2020 D-MAX, is reportedly in the pipeline and will appear in late 2020. If so, this is a swapping of partners for Mazda and Isuzu, given Mazda worked with Ford and Isuzu with General Motors in the design and development of the current-generation utes.

The fact that Isuzu has already revealed its new D-MAX while Mazda remains light-lipped suggests that, if these two new utes are indeed a co-operative effort, then Isuzu has taken the lead in this project. Isuzu being the senior partner would also make sense given Isuzu's main game is utes (and trucks) where Mazda's main game is passenger cars and SUVs.

Assuming that Mazda does have a new ute in the pipeline, and there's a tie-up with Isuzu, there are a few possibilities. Mazda could just stick

its badge on a D-MAX, or do a re-skin (new body panels), or perhaps do all that and add its own powertrain. Mazda's CX-8 has a 2.2-litre four-cylinder turbo diesel that claims 140kW and 450Nm, which matches the new D-MAX's numbers.





TOYOTA LANDCRUISER 200 AND LANDCRUISER PRADO

IN 2020, Toyota's LandCruiser 200 will be 13 years old while its Prado, or LandCruiser 150, will be 11 years old. Time for new models, one would think. Mind you, we have been saying that for ages and new models are yet to materialise. What's more, Toyota is saying nothing.

The timeline for release in Australia of either a 200 replacement (let's call it a 300) or a 150 replacement (let's call it a 180) will likely hinge around the implementation of Euro 6 emissions regulations, which is still up in the air. If Toyota released the '300' and the '180' now – as in time of writing – it could make do with the current Euro 5 diesel engines. If Euro 6 comes into play before then, the 2.8-litre

four in Prado can be readily converted to Euro 6 with the addition of selective catalytic reduction (AdBlue). Toyota has already told us that much. The 4.5-litre V8 diesel should also be able to meet Euro 6 but will require more work.

New petrol engines for both the '300' and the '180' are also in the pipeline, but they may not appear in Australian models in the short term while buyer preference in this market sector remains firmly in the diesel camp. And when new petrol engines do appear they will be most likely teamed up to secondary electric motors in hybrid powertrains.

Otherwise it's probably business as usual; separate chassis, a rear live axle and mechanical full-time 4x4. **4x4**

The current Prado 150 is now 11 years old and chances are a new '180' model will arrive in 2020.



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GLADIATOR READY

WORDS MATT RAUDONIKIS PHOTOS CRISTIAN BRUNELLI





**JEEP'S GLADIATOR
PICK-UP DOESN'T
LAND IN AUSTRALIA
UNTIL APRIL/MAY,
BUT WE MANAGED
TO SNARE ONE FOR A
DAY IN THE DUNES OF
NEVADA.**

THE JT GLADIATOR marks Jeep's return to the pick-up truck market, and the good news is it's coming to Australia. It should land here sometime around April or May, but we couldn't wait until then to drive it. When we found out that our mate Bill Barbas from Melbourne Jeep specialist Double Black Offroad was driving a Gladiator Rubicon around Las Vegas while we were there for the SEMA Show, we had to steal the keys for a day.

The JT Gladiator is based on the Jeep Wrangler and from the B-pillars forward it's pretty much identical. At the back there is a load bed behind the four-door cabin, and the rear of the chassis and the 5-link suspension takes design features from the Ram 1500 truck to make it a better load hauler.

The Gladiator is classed as a midsize pick-up in the USA, so it's grouped against the likes of the Toyota Tacoma, Ford Ranger and Chevy Colorado, which means many will pit it against the popular Hilux, Ranger and Colorado here; but, in reality, it is a very different vehicle. For a start it rolls on live axles and coil springs both front and rear, while all our popular one-tonne utes have IFS and leaf-sprung live-axle rears. With its live axles and lockers, you can expect the Jeep JT Gladiator to be a better off-road vehicle than any other stock ute sold in Australia.

However, the Jeep can't match the approximate one-tonne payload of our popular utes. In the USA, Jeep claims best-in-class load and towing capacities, but it doesn't match what we expect

here in Australia. In US-specification, the Gladiator Rubicon as driven will carry just 526kg and tow 3175kg. That gets worse with the taller 3.73:1 final-drive gearing in the Sport and Overland models, and with the manual transmission. In the US, though, you can option the Rubicon's 4.1:1 final drive gears into a Gladiator Sport to deliver close to 700kg payload and 3470kg towing.

In Australia, we will get an International version of the Gladiator much like we do with the JL Wrangler, which means we'll miss out on some of the good gear on the US models. Our International spec JTs will be limited to 2712kg towing and 620kg payload, so it is down on many of its would-be competitors.

Another huge point of difference for the Jeep will be its petrol-only power train in a diesel-fuelled ute market. Jeep hasn't ruled out a diesel in the JT, but at launch it will only be available with the 3.6-litre petrol V6 engine backed by an 8-speed auto. You can pretty much rule out a manual gearbox in Australia, as is the case with the JL Wrangler.

Possible diesel engine options that could be available in the future include the 3.0-litre V6 engine, as found in the Jeep Grand Cherokee and Ram 1500 and which will soon be fitted to the JT in the USA, or the 2.2-litre 4-pot as we get in the JL Rubicon, but Jeep officials have been reluctant to say anything about these possibilities to this point.

A power train option for the future will be EV and hybrid drive with Jeep confirming that all of its models will be electrified by 2022 as it plans to become 'The greenest SUV brand' in the world.

THE QUALITY DAMPERS MADE EASY WORK POUNDING OVER DEEP CORRUGATIONS, RUTS AND ROCKS IN THE NEVADA DESERT



01



02



03



1. The Gladiator's interior is very ... Wrangler.
2. The uber familiar 3.6-litre Pentastar V6.
3. Vented hood gives the JT a visual punch.
4. The tray is back! At 1524mm long.
5. The 5573mm-long JT is surprisingly nimble.

04



05





01. Fox Racing shocks are fitted to US-spec models.
02. Falken Wildpeaks were aired down for Nevada's sand dunes.

WHATEVER SPEC IT TAKES WHEN IT GETS TO AUSTRALIA, A TRUE OFF-ROAD VEHICLE WILL FINALLY MATERIALISE IN THE 4X4 UTE MARKET

Considering the powertrain we know we will get in Australia, how does it go? Jump behind the wheel of the Gladiator and you could be in any JL Wrangler; it's all the same interior layout, switchgear and view over the bonnet. The JT Rubicon we drove was powered by the Pentastar V6 engine and 8-speed auto we'll be getting here, so all familiar and good there, too. It isn't until you hit the highway that the longer wheelbase of the JT proves markedly different to the JL.

The Gladiator rides on a 3487mm wheelbase as opposed to the JL Wrangler's 3008mm, so it's a bit more stable and surefooted on road than the Wrangler. There's still the light steering that likes to wander at speed, as we've noted in Wranglers, but the bigger ute feels firmer on the road. The Gladiator is also long at 5573mm overall compared to the four-door Wrangler at 4882mm, and you really notice it in suburban carparks and on tight bush tracks.

We thought the long wheelbase would pose a problem for the Gladiator off road, but even though it scraped over the peaks of sand dunes, the sand was soft and the Rubicon's rock rails took the top off them without getting hung-up.

Jeep claims a 20.3° ramp-over angle for JT Rubicon compared to 21.2° for the international-spec JL Rubi we get in Australia.

The long wheelbase and overall length didn't pose as much of a problem as expected on a tight U-turn on the side of a steep hill, either. It was a track made for UTVs and buggies, but the XL Jeep could have made the turn in one bite; we only backed it up to get a straighter drop over a rock step on the descent.

The US-spec JT Rubicon is equipped with Fox Racing shocks and 33-inch all-terrain tyres; the 33-inch muddies on this car are optional. That doesn't necessarily mean we'll get these goodies here as we've found with the local-spec JL Wrangler which gets smaller rubber, but we're keeping our fingers crossed that things will be different for the JT.

The quality dampers made easy work pounding over deep corrugations, ruts and rocks in the Nevada desert, and the Rubicon's disconnecting front sway bar improved the ride and control over rough terrain at lower speeds. Front and rear lockers were also great in the rough stuff, but we found the electronic traction control struggled in some soft sand.

Whatever specification it takes when the Gladiator gets to Australia next year, a true off-road vehicle will finally materialise in the 4x4 ute market. We reckon it will sit somewhere between the common one-tonne 4x4 utes and a LandCruiser 79 in terms of price, with two variants; an Overland and the Rubicon. Like most Jeeps it will be bought by enthusiasts who will delve into the ocean of kit available from the factory and aftermarket, to build the Gladiator they want and need.

The Gladiator will be worth the wait and we're looking forward to driving the JT Down Under, to see how it handles local conditions, a load in the tray, and the outback. **4x4**

JEEP JT GLADIATOR RUBICON	
ENGINE	Pentastar 3.6-litre V6
OUTPUT	213kW; 353Nm
TRANSMISSION	Eight-speed automatic
TRANSFER CASE	NV2410R Rock-Trac (Rubicon)
AXLES/RATIOS	Dana 44; 4.1:1
CRAWL RATIO	84.2:1 (Rubicon manual)
STEERING	Electro-hydraulic
SUSPENSION	Links, coil springs, stabiliser bars (f/r)
TYRES	285/70R17 Falken A/T or M/T
BASE WEIGHT	2290kg (Rubicon)
PAYLOAD	700kg
TOWING CAPACITY	3470kg
WHEELBASE/TURNING CIRCLE	3487mm; 1356cm
APPROACH/RAMP-OVER/DEPARTURE ANGLES	43.4°; 20.3°; 26° (Rubicon)





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AUSSIE ENGINEERING EXCELLENCE ARMS NISSAN'S NAVARA WARRIOR WITH THE WEAPONRY IT DESERVES

WITH THE exception of a small community of doomsday preppers who have already sealed themselves in bunkers under the desert, it is impossible to ignore the rise in popularity of the dual-cab ute. And that's a shame because, ironically, there's a thriving segment at the pointy end of the one-tonne market that would really appeal to people who believe Armageddon is upon us.

The highly accomplished Ford Ranger Raptor took one-tonne toughness and off-the-shelf all-terrain ability to a new level and, despite a hefty asking price, people have been flocking to its combination of athleticism and gruff looks. A handful of rivals have responded with toughened versions of more prosaic model lines including Toyota's Hilux Rugged X and the HSV SportsCat, but nothing has yet challenged Ford's hulk and won.

Now it's Nissan's turn. It might look like another lamb to the slaughter, but the new range-topping Navara goes further than the hopefuls before it, which did little more than add a bit of show and not much go. For a start, Nissan Australia recruited automotive engineering authority Premcar – the mob that created the Ford Falcon Holy Grail – to craft a Navara specifically for Australian tastes. The result is a ute you can't buy anywhere else in the world, but that might change now that Nissan global has sampled the results.

Oh, and then there's the name. Make no mistake on this Aussie-fettled off-roader's intent because it's called the Warrior. Based on the Navara N-Trek, the Warrior sits at the top of the pack as the new halo of the range and an ultra-sharp price of \$62,990 drive-away, or \$65,490 for an auto, is just the start of a compelling package. We sampled the new Navara N-Trek Warrior in Victoria's spectacular high country to see how it establishes its position in the emerging premium dual-cab ute arena.

POWERTRAIN AND PERFORMANCE

WHAT HASN'T changed is probably the best place to start with the Warrior, and that includes its engine. It's business as usual for the 2.3-litre twin-turbo four-cylinder diesel that drives the rest of the dual-cab Navara range (with the exception of the entry SL). That means 140kW and a respectable 450Nm sent to the dirt via a seven-speed automatic transmission or six-speed manual – also unchanged.

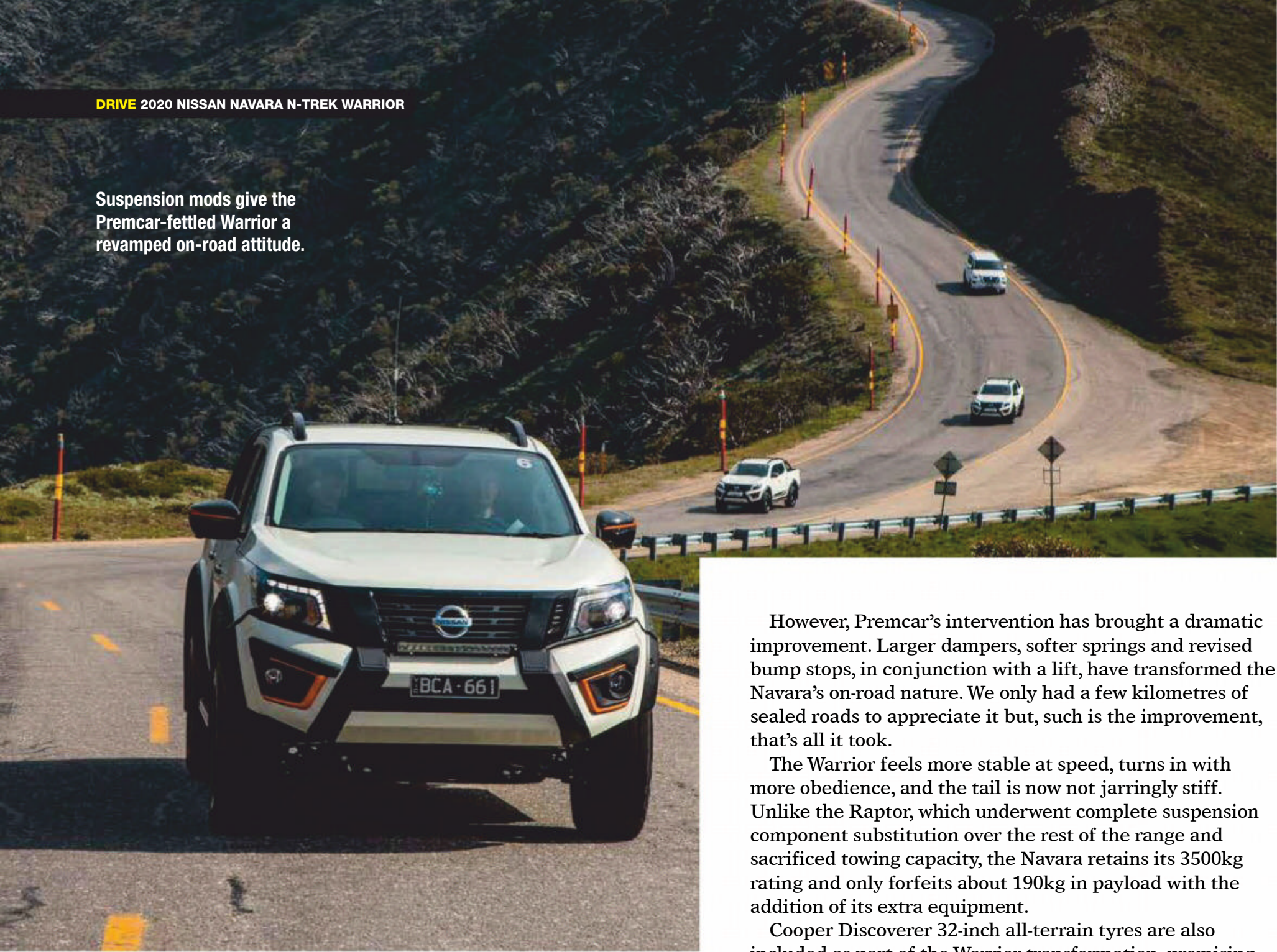
There's good urgency off the mark and the four-pot is responsive in gears thanks to its sophisticated two-turbo plumbing, but it can feel lacking in outright power for road duties. Happily, though, the engine and gearbox combine beautifully for off-road yakka, with the linear-revving characteristics and solid torque throughout making so much more sense when the trail turns tricky.

It's also frugal and seems happiest working hard. There are those who argue unnecessary complication of twin-turbos could potentially jeopardise reliability when you need it most, but you could counter-argue running out of fuel is more likely to leave you stuck in the outback.

ON-ROAD RIDE AND HANDLING

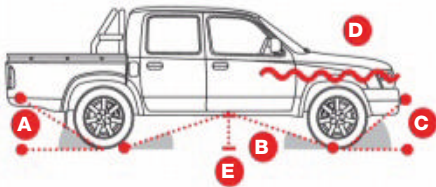
MUCH FANFARE was made of the Navara's coil-sprung rear axle when the NP300 (D23) launched in 2015, but the relatively unusual suspension setup has never quite delivered on its promise of unrivalled dual-cab comfort. Even with a couple of revisions since.

Suspension mods give the Premcar-fettled Warrior a revamped on-road attitude.



NISSAN NAVARA
N-TREK WARRIOR

A DEPARTURE ANGLE	29°
B RAMPOVER ANGLE	27.5°
C APPROACH ANGLE	35°
D WADING DEPTH	N/A
E GROUND CLEARANCE	268mm



However, Premcar’s intervention has brought a dramatic improvement. Larger dampers, softer springs and revised bump stops, in conjunction with a lift, have transformed the Navara’s on-road nature. We only had a few kilometres of sealed roads to appreciate it but, such is the improvement, that’s all it took.

The Warrior feels more stable at speed, turns in with more obedience, and the tail is now not jarringly stiff. Unlike the Raptor, which underwent complete suspension component substitution over the rest of the range and sacrificed towing capacity, the Navara retains its 3500kg rating and only forfeits about 190kg in payload with the addition of its extra equipment.

Cooper Discoverer 32-inch all-terrain tyres are also included as part of the Warrior transformation, promising good times off-road but are notably quiet and smooth on-road too. Perhaps the only disadvantage to the silent rubber is that it allows you to better hear the wind noise from the standard sports bar.

It’s not hard to see why Japanese engineers are closely examining the changes made on Australian soil by Australian developers, and the Warrior may subsequently conquer other markets outside its country of origin.

OFF ROAD

THE DEFT suspension tuning continues to deliver when the road comes to an end, too. In standard trim the Navara wasn’t exactly hobbled off road, but the Warrior’s set of modifications have made a huge difference here too. A 40mm total lift (the result of suspension modifications combined with the 32-inch Cooper rubber) has boosted ground clearance to 268mm, with significant improvements to approach and departure angles – now 35- and 29-degrees respectively.

The combination results in a seriously well-rounded performer in the rough. Washed-out drains that might have grazed the nose of some others are now a breeze, and we only touched earth with the towbar once. Speaking of which, the towbar is part of the Warrior package and has been significantly reengineered to allow a fifth 17-inch wheel wearing the same Cooper tyre to come along for the ride in its existing place under the tray. That’s a big plus for those wishing to hit the High Country hard.

The bespoke alloy wheels are an inch smaller than the standard N-Trek rims, but that allows more tyre to be fitted for all the advantages associated with taller sidewalls.

In previous tests we praised the Navara’s locking diff





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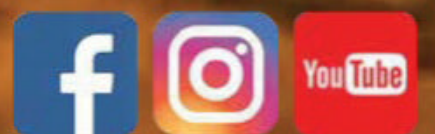
Performance Clutch
Upgraded Torque Capacity



Power Without Compromise



Safari 4x4 Engineering Pty Ltd
Melbourne, Australia. www.safari4x4.com.au





Spare Cooper tucked underneath is part of the Warrior package.

NISSAN NAVARA N-TREK WARRIOR	
ENGINE	2.3-litre 4-cyl twin-turbo diesel
MAX POWER	140kW at 3750rpm
MAX TORQUE	450Nm at 1500 to 2000rpm
GEARBOX	6-speed manual/7-speed auto
4X4 SYSTEM	Dual-range part-time
FRONT SUSPENSION	Independent/coil springs
REAR SUSPENSION	5-link/coil springs
BRAKES	Discs front/drums rear
WHEEL/TYRE SPEC	17x8.5 / 275/70 R17
KERB WEIGHT	2180kg
GVM	2910kg
PAYLOAD	730kg
TOWING CAPACITY	3500kg
GCM	5910kg
FUEL TANK CAPACITY	80 litres
ADR FUEL CLAIM	6.5 litres/100km
PRICE	\$62,990 manual; \$65,490 auto

which maintains front-axle traction control, and the feature works even better with the modified setup. Rather than pointing the Warrior at nasty moguls and pulling the trigger, a slower, careful approach is possible allowing more precise negotiation of the most challenging terrain. The overall sense of control and capability is notable and brings a renewed sense of confidence to push harder and go farther.

The rear-axle revisions have also imparted a ride that has boosted cabin comfort for occupants. The onset of fatigue from long days away from sealed surfaces is delayed, and our driver and one passenger arrived at camp feeling fresher than expected. We still needed a beer, though.

PRACTICALITIES

JUST AS commendable as the Warrior's tangible changes is the warranty that comes with it. Despite the significant mods, Nissan's recently introduced five-year promise is honoured by the Warrior. Premcar's engineering director explained that's one reason the lift kit was capped at 40mm. If you see aftermarket options to boost your Navara to 50mm, expect the ball joints to over-articulate and fail early, says Bernie Quinn. Everything that's bolted to the Warrior, however, is covered.

Taking out a 'roo isn't. But at least the fully integrated hoopless bullbar provides some protection from wayward marsupials. The feature is a standout, adding a great purposeful front end aesthetic along with its extra light bar. The Warrior couldn't be further from looking like a sticker pack or accessory program; it's handsome with a solid stance and appears a well-considered package ... because it is.

CABIN AND EQUIPMENT

ASIDE FROM some orange highlights and embroidered headrests, there's not a lot inside the Warrior to remind you that it's quite special. In some other dual-cabs that mightn't be such a criticism, however here was an opportunity for some of the less-

inspiring Navara design to be redeemed but was ignored.

Rear seat room is certainly adequate if your intention is as a family wagon, and comfort in all five spots is good; although, a steering wheel that doesn't adjust for arm reach is a reminder that the model which provides a basis for the Warrior is feeling its age. Inoffensive is probably the fairest way to describe the Warrior's interior.

THE WRAP

WITHOUT THE significant advantage of a fully engineered suspension setup, including Fox dampers and a tailored chassis to accommodate it, it's unlikely anything is going to match the unstoppable manners of the Ranger Raptor. And nor will the Navara N-Trek Warrior.

But neither does it have the eye-watering price that comes with a similarly extensive development program. And that's where the Warrior really excels – in value. Costing just \$6500 over the previous N-Trek flagship, the value of a locally developed machine that looks handsome without being ostentatious and genuinely delivers is simply undeniable.

While it doesn't look like anything is going to defeat the mighty Raptor just yet, the N-Trek Warrior is a worthy adversary to its sibling, the Wildtrak, as well as the equivalent Toyota Hilux Rugged X and HSV SportsCat. The Raptor might secure its reign through brute force, but the Warrior's most potent weapon is the ability to fight fearlessly on the value front line. **4x4**



Revised dampers, springs and bump stops improve off-road control and ability.

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WORDS DEAN MELLOR PHOTOS MARK BEAN

MIR BiG

WE GET BEHIND THE WHEEL OF NISSAN'S REVAMPED- FOR-2020 PATROL Ti.

NISSAN HAS given the Patrol a freshen-up for MY2020 with new styling front and rear, tweaks to the suspension tune, and the inclusion of new safety features on both Ti and Ti-L models.

While midlife style updates often don't do the original vehicle design justice, the new-look Patrol works well, giving the vehicle a sharper and more integrated overall look that slightly minimises the once bulbous appearance of this undeniably big eight-seat wagon. At the front new LED lights and grille combine with two new bumper designs to give the Patrol a more modern appearance. The Ti model grade (as tested) scores what Nissan describes as "a unique sporty

front-end design", while "the Patrol Ti-L front bumper showcases a more premium look"; essentially, the Ti-L bumper has more horizontal lines, more chrome and relocated fog lights. Changes at the rear of both model grades include a slightly different tailgate pressing, redesigned LED tail-lights and a full-width chrome strip with integrated nameplate, giving a tidier and wider overall look.

The equipment changes mostly centre around upgrades to Nissan's Advanced Driver-Assistance Systems (ADAS). Both the Ti and Ti-L models are now equipped with Intelligent Emergency Braking, Intelligent Forward Collision Warning and Rear Cross



Traffic Alert. Once exclusive to the Ti-L, the lower-grade Ti now also comes with Intelligent Cruise Control (ICC), Lane Departure Warning (LDW), Intelligent Lane Intervention, Blind Spot Warning (BSW) and Intelligent Blind Spot Intervention. Both models now have auto-folding exterior mirrors.

These upgrades come at a cost, with the Patrol Ti up by \$3110 to \$75,990 plus on-roads, and the Ti-L up by \$2110 to \$91,990 plus on-roads. Despite these modest increases the Patrol is still a relative bargain compared to its most obvious direct competitor, the LandCruiser 200 Series; the well-equipped Patrol Ti is around \$4K cheaper than a stripped-out LandCruiser GX, while the top-of-the-range Patrol Ti-L is the same price as a basic LandCruiser GXL. And if you want a Cruiser nearing the Patrol for equipment spec, you'll need to fork out more than \$102K for a VX or more than \$123K for the top-spec Cruiser Sahara.

Regardless of the Patrol's apparent bargain status, the LC200 outsells it on the Aussie market at a rate of almost eight to one. This can be largely attributed to the lack of a diesel engine in the Patrol, which is exclusively powered by a 5.6-litre petrol V8, while the LC200 now comes exclusively with Toyota's 4.5-litre turbo-diesel V8. The market has spoken ... and the market says "diesel rules".

POWERTRAIN

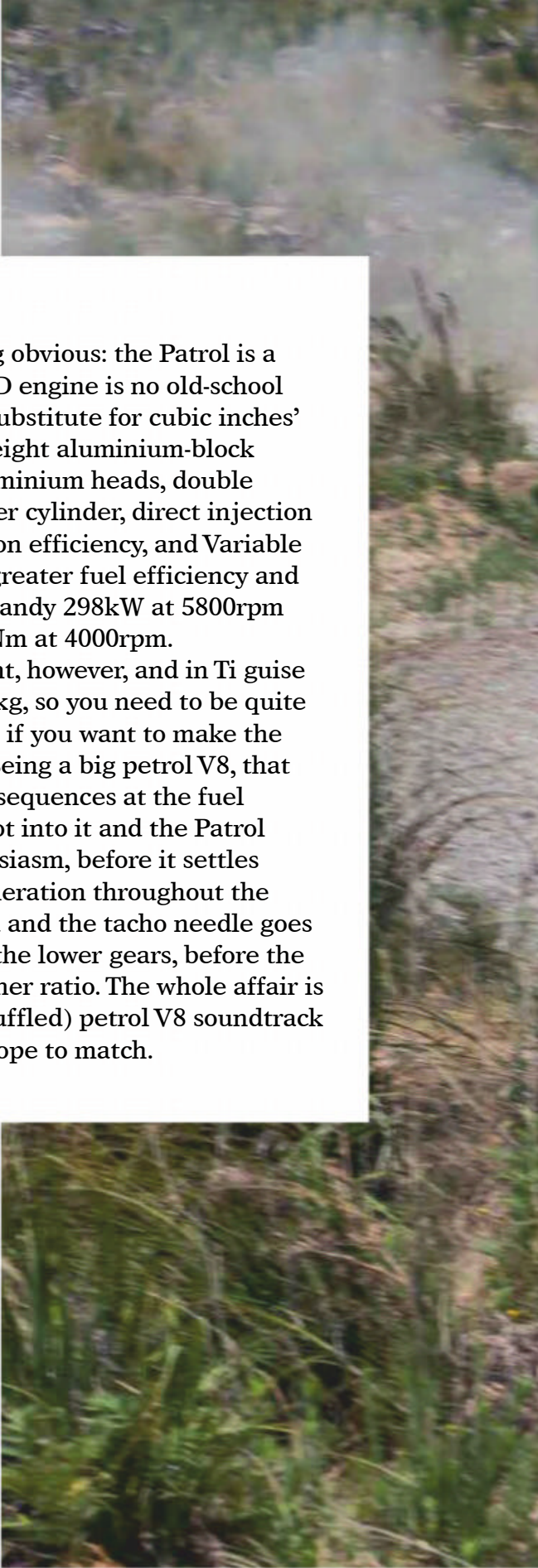
OKAY, let's start with the bleeding obvious: the Patrol is a bit of a gas guzzler. But its VK56VD engine is no old-school petrol V8 dinosaur. Despite a 'no substitute for cubic inches' 5.6-litre displacement, this lightweight aluminium-block V8 is a high-tech wonder, with aluminium heads, double overhead camshafts, four valves per cylinder, direct injection technology for optimum combustion efficiency, and Variable Valve Event and Lift (VVVEL) for greater fuel efficiency and output. Claimed peak power is a handy 298kW at 5800rpm and torque peaks at a grunty 560Nm at 4000rpm.

The Patrol itself is no lightweight, however, and in Ti guise it weighs in at a rather hefty 2812kg, so you need to be quite generous with throttle application if you want to make the most of all that on-paper output. Being a big petrol V8, that kind of driving style will have consequences at the fuel bowser. Nevertheless, put your boot into it and the Patrol will launch off the line with enthusiasm, before it settles into a period of rather linear acceleration throughout the mid-range. Keep your foot planted and the tacho needle goes ballistic from 5000 to 6200rpm in the lower gears, before the seven-speed auto reaches for another ratio. The whole affair is accompanied by a satisfying (if muffled) petrol V8 soundtrack that no diesel engine could ever hope to match.



MIGHTY V8

The high-tech 5.6-litre petrol V8 makes an addictive 298kW and 560Nm.



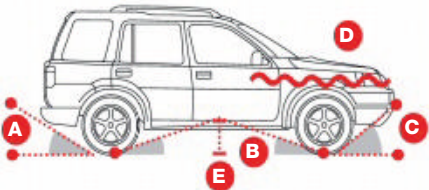
RIGHT RUBBER

The sensible 265/70R18 tyres offer plenty of sidewall for off-road driving.



NISSAN PATROL TI

A DEPARTURE ANGLE	23.6°
B RAMPOVER ANGLE	N/A
C APPROACH ANGLE	34.4
D WADING DEPTH	N/A
E GROUND CLEARANCE	273mm



MR BIG

The Patrol's trick cross-linked suspension provides a compliant ride and flat cornering.



Of course, you can't drive around like a hoon all day long, and if you're happy to plod along at a reserved pace you'll soon realise one of the other great benefits of this V8 petrol engine; it's super smooth, quiet and refined ... and not *too* thirsty. On test we recorded a surprising average fuel consumption figure of 15.2L/100km, which included a mix of city, country and off-road driving, but consumption can drop to as low as 12 to 13L/100km on the freeway.

The Patrol's seven-speed auto shifts smoothly and offers more than enough ratios for poking around town or cruising on the open road. It can sometimes be a little slow to downshift when you want to press on, but this can be quickly resolved with a prod of the throttle or by knocking the shift lever over to the left and changing gears manually.

The Patrol uses Nissan's Intelligent 4x4 system which in 'Auto' mode is essentially an on-demand 4x4 system that directs most torque to the rear wheels unless slip is predicted or detected, at which point it will transition up to 50 per cent of torque to the front wheels. The torque transition is seamless. As well as 'Auto', there are user-selectable '4H' and '4L' modes for off-road driving conditions, and these are engaged via a dial on the centre console. While '4H' can be selected on the fly, you have to stop and shift into neutral to engage '4L'. The low-range gearing offers a crawl ratio of 43.95:1.

The 4x4 system also offers a range of modes to suit different driving conditions (On Road, Rock, Snow and Sand) essentially tailoring throttle sensitivity and transmission function to suit, and the Patrol also features Nissan's Active





**MR
BIG**

THE PATROL EASILY HANDLED ALL OF THE OFF-ROAD OBSTACLES WE THREW ITS WAY INCLUDING STEEP CLIMBS, SLIPPERY DESCENTS AND TIGHT BUSH TRACKS

Cross-linked hydraulic rams replace conventional dampers and sway bars.



Brake Limited Slip (ABLS) traction control system, as well as a user-lockable rear differential lock.

ON-ROAD RIDE AND HANDLING

DESPITE its bulk and weight, the Y62 has always delivered surprisingly agile handling combined with a plush yet controlled ride, and this is still the case despite Nissan tweaking the suspension tune for MY2020. The Patrol's fully independent double wishbone suspension is key here, with much less unsprung weight than a live-axle arrangement, but the trick Hydraulic Body Motion Control (HBMC) system also plays a big part in how the Patrol drives on the road.

The HBMC system essentially cross-links four oil cylinders (or hydraulic rams) via accumulators and hydraulic pipes so that when cornering, the fluid from the two outside rams flows to the accumulators to raise roll stiffness, which in turn minimises body roll. These rams essentially fulfil the dual functions of shock absorbers and sway bars. The result is a compliant ride when driving over rough surfaces, but the suspension 'firms up' when cornering for a sporty feel.



The Patrol rides on 265/70R18 Bridgestone Duelers so there's plenty of sidewall to soak up bumps, and while the vehicle-speed-sensitive power steering is nice and light at low speeds it firms up enough at higher speeds to offer reasonable feel and good feedback. Sure, the Patrol is no sports car on the road, but it offers more composed handling than any vehicle of this size and weight has a right to ... and not at the expense of ride comfort.

OFF ROAD

ANOTHER benefit of the Patrol's HBMC system is that it doesn't adversely affect wheel travel when driving off-road, as there are no sway bars. In fact, the Patrol offers impressive wheel travel both at the front and the rear, and it is this that is clearly on display when crawling over undulating terrain.

Other off-road positives include decent low-range reduction, an effective traction control system, good hill descent control, reasonable ground clearance (273mm) and a sturdy under-engine protection plate. The Patrol easily handled all of the off-road obstacles we threw its way including steep and undulating climbs, slippery descents and tight bush tracks.

On the downside, the traction control system disengages when the rear diff is locked, approach and departure angles are not fantastic, and the big side-steps are prone to grounding when driving over erosion drains or manoeuvring around obstacles. Poor outward visibility doesn't help in this regard, either (due to the big bonnet, high hipline and smallish rear window); although, the Patrol is equipped with a series of cameras allowing you to select different outward views (wheel placement, in front and behind the vehicle, or simulated 360-degree overhead) which proved handy when dropping over rock shelves or manoeuvring in tight spots.

ACCOMMODATION AND SAFETY

AS YOU'D expect of a big eight-seat wagon, the Patrol offers generous interior space. The big, leather-covered front seats offer a good range of power adjustment, the driver's seat gets lumbar adjustment, and the steering wheel is tilt/reach adjustable. The dash design and instrument cluster are a

NISSAN PATROL Ti	
ENGINE	5.6L petrol V8, direct-injection
MAX POWER	298kW at 5800rpm
MAX TORQUE	560Nm at 4000rpm
GEARBOX	7-speed automatic
4X4 SYSTEM	On-demand full-time 4x4
CRAWL RATIO	43.95:1
CONSTRUCTION	Separate-chassis
FRONT SUSPENSION	Independent/coil springs, linked hydraulic dampers
REAR SUSPENSION	Independent/coil springs, linked hydraulic dampers
WHEEL/TYRE	18 x 8J alloy/265/70R18 116H
KERB WEIGHT	2812kg
GVM	3500kg
PAYLOAD	688kg
TOWING CAPACITY	3500kg
TOWBALL DOWNLOAD (MAX)	350kg
GCM	N/A
FUEL TANK CAPACITY	140L
ADR FUEL CONSUMPTION	14.4L/100km

little dated, the former with lots of faux wood and the latter with analogue gauges and monochrome graphics, and you have to reach for buttons around the instrument binnacle to scroll through trip-computer pages and reset the tripmeters.

The centre touchscreen is bright and colourful enough, but its dual controls (touch and dash-mounted buttons/dials) are awkward, while the lack of Apple CarPlay/Android Auto is an almost unforgivable oversight in this day and age. Other controls such as heating and ventilation require some user familiarisation; although, the 4x4 system and off-road mode controls are clearly marked and easy to use.

There's plenty of storage space around the cabin including a big centre-console bin, a decent-size glove box and generous door pockets with bottle holders. There are two USB ports up front and two 12V power outlets.

The 60:40 split/fold second-row seat offers plenty of width for three occupants and good leg room, even in the centre position. There's clever access to the centre console bin between the front seats from this row (it has a double-hinged lid), and those in the middle row also get large door pockets, AC controls, roof vents and two USB ports.

Access to the third-row seats is good thanks to tumble/fold second row seats, but once back there it's quite cosy and really only suited to smaller kids. Fitting three across the third row would be a real challenge and, although the centre position has



LOUNGING ABOUT

The big leather-covered front seats offer good comfort and adjustability, and lots of space.

DATED DIALS

The instruments/trip computer look dated and there's no Apple CarPlay/Android Auto.



**TIDY REAR**

The rear-end has a restamped tailgate with new LED lights and a full-width chrome strip.



a three-point seat belt, there's no headrest. There are roof vents and cup holders in the third row and the seat-backs have rake adjustment.

The cargo area is big enough to fit a 30-litre fridge and some other luggage, even with all three rows of seats in use. Fold the third-row seats down and the cargo area is huge. Fold the second-row seats down as well and it's downright massive in the back of the Patrol, with an almost flat floor all the way to the back of the front seats. There's a 12V power outlet in the cargo area, six cargo tie-down points and a small underfloor storage area suitable for wet or dirty gear. The one-piece lift-up tailgate is quite heavy and there's no power assistance.

On the safety front, the Patrol packs the aforementioned Advanced Driver-Assistance Systems (ADAS), the usual array of three-letter abbreviations (ABS, TCS, VDC, EBD), driver and passenger front and side SRS airbags, curtain airbags for all three rows, two second-row ISOFIX and two top-tether child seat anchors, a third-row child seat anchor, and a tyre-pressure monitoring system (TPMS).

PRACTICALITIES

THERE'S no denying that the Y62 Patrol is a big beast, and when it comes to tight spots such as shopping centre car parks or bush tracks, it can be a handful; but the steering lock is reasonable and results in a 12.5m turning circle, which is on par with many 4x4 utes. The external cameras that feed the around-view monitor help in this regard.

The Patrol has recovery points fitted front and rear and a reasonable under-engine protection plate. Underbody components, including the underslung full-size spare wheel, are tucked up and out of the way.

There's not much space under the bonnet, so those wanting to fit a dual-battery system will have to position the auxiliary battery under the vehicle or in a box in the cargo area. The air intake is located up high and through the passenger-side inner guard, but the alternator is located quite low in the engine bay.

THE PATROL Ti IS A FANTASTIC VEHICLE, BOTH ON THE ROAD AND OFF IT, AND IT PACKS PLENTY OF STANDARD EQUIPMENT FOR THE ASKING PRICE

The Patrol might be a thirsty beast, but with a 140-litre fuel tank you'll get more than 900km out of a fill, so long as you don't get too heavy with the throttle. Nissan recommends 95 RON minimum, and there's a sticker inside the fuel lid suggesting 98 RON, so your credit card will take a hammering at the servo.

The Patrol Ti has a decent 688kg payload capacity and it's rated to tow a braked trailer up to 3500kg but, again, it'll get thirsty with a big trailer on the back.

IN SUMMARY

THIS LATEST update to the Y62 Patrol gives it a fresh, new exterior look, but it would've been nice if there were a few more updates on the inside, too. Nevertheless, the Patrol Ti is a fantastic vehicle, both on the road and off it, and it packs plenty of standard equipment for the asking price. As a petrol-V8-only proposition, though, it will always be a bit player in the upper-large 4x4 wagon segment.

Since the Y62 Patrol was launched in Australia back in 2012, there have been rumours of a diesel variant, and it's a real pity such a model has never materialised because we reckon it would sell like hotcakes and give the 200 Series Toyota LandCruiser a run for its money, as well as some of the more expensive top-spec 4x4 utes. **4x4**



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CUSTOM

TOYOTA HJ75 LS1 V8



OUTLAW COUNTRY

**FORGET 'CRUISER COUNTRY, THESE
HILLS ARE FOR OUTLAWS.**

WORDS DAN EVERETT PHOTOS NATHAN JACOBS



OUTLAW COUNTRY



Rules? What are they? Brett's mantra is to build it his way.



Pop the glovebox to reveal the 'unconventional' electrical setup.



01



THE VICTORIAN High Country has been synonymous with the outlaw lifestyle for nearly 200 years. It's a place where the only things more wild and outlandish than the geography are the people who call it home. For centuries the mountains and valleys rang with the echoes of gunfire and pounding horse hooves, the long arm of the law in lockstep behind. It's fitting then that after countless years, those same mountains and the valleys that connect them still roar with the sound of people who forge their own paths; although, now they're a little louder and come sporting mud tyres.

Spread out in front of you is the prime example of that outlaw mentality. A vehicle built to be what the man who built it wanted it to be, not what a rulebook somewhere said it

should be. And it's bloody glorious.

Like any good story, this one starts a long time ago; about 10 years to be exact. Brett's old man was trading in his near-dead HJ75 for a brand-new HDJ79, and he threw the keys to then 16-year-old Brett. Leaf springs, half full of rust and every inch showing the hard yakka it'd been put through on the family farm, ever since Brett was just a baby. It'd serve as the perfect platform for Brett to learn the ropes, not only for driving on and off the road, but spinning spanners on old tin.

For the last 10 years Brett's spent countless hours patching this, fixing that, keeping the tired old rig on the road. It's been through countless engines, suspension setups and running repairs before it finally got too much. Brett called in the help of a few mates, put it on jack stands and got to work.

The plan was simple: Unbolt the original cab, remove everything underneath it, and replace it all with later model gear from an 80 Series

02



01

FLEX FREAK

The braced 80 Series diffs are stuffed with RCV axles and ARB Air Locker lockers for strength and traction on the toughest tracks.

02

TOTAL RECOIL

RidePro coils, Superior Engineering remote-reservoir shocks and Profender hydraulic bump stops up front help conquer rocks, boulders ... and stumps.

A SimFab four-inch stainless snorkel feeds the newly transplanted LS1.



THE 400HP LS1 V8 FROM BRETT'S DAILY DRIVEN VX SS COMMODORE WAS SLOTTED INTO ITS NEW HOME



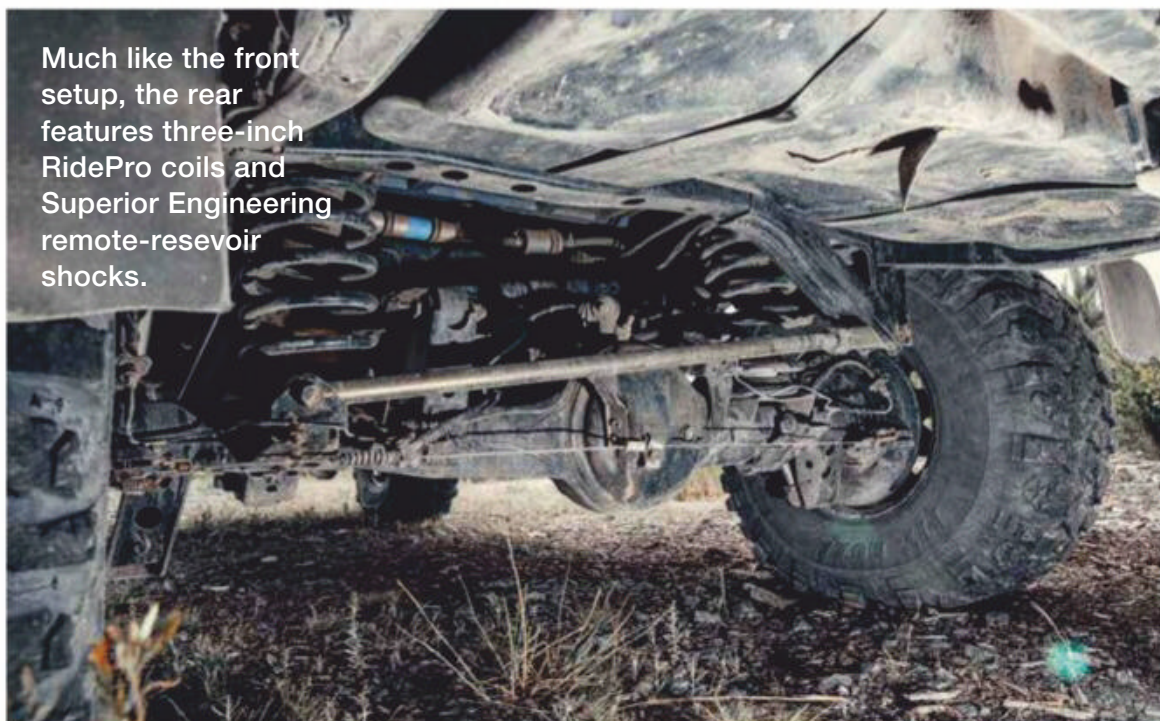
LandCruiser, chassis and all. The new setup brings not only an increase in articulation from converting to coil springs, but also improves ride quality, beefs up the brakes and converts to a physically larger CV joint. The only downside is a slightly smaller ring gear. Of course, Brett didn't leave things there either; the housing is braced to protect against bending in hard landings, and it's stuffed full of chromoly CVs from RCV, upgraded kingpin studs from ARP, beefier steering arms and heavy-duty hub nuts from USA-based Trailgear. The whole lot is sent to drive via an ARB Air Locker.


On the suspension front, RidePro coils now hold the frame three inches higher than stock with Superior Engineering's remote reservoir shocks keeping things behaved. If Brett gets a little carried away through undulating terrain there's a set of Profender hydraulic bump stops grafted in that'll smooth things out.

Moving rearwards the rudimentary leaf spring rear-end has also been long forgotten, the LC80 chassis swap not only bringing coil springs to the party but also an elaborate five-link arrangement to provide a smooth ride and monster flex. The rear housing remains largely untouched; although, an ARB Air Locker drives both wheels, with ARP axle studs ensuring the axles stay attached to the hubs. The rear suspension components mimic the front with three-inch Ridepro coils and Superior Engineering remote-reservoir shocks. Eagle-eyed readers may spot the wheelbase looks a little tighter than stock, too – the 80 Series is a full 300mm shorter than a stock 75, making Brett's rig much nimbler in tight terrain.

Despite the original 1HZ having a turbo on it, it could best be described as somewhat lethargic, and swapping it out for another 1HZ+T wasn't really going to get the blood pumping; so when Brett looked at his daily-driver VX SS Commodore, the 400hp LS1 nestled between its frame rails caught his eye. The choice was obvious and the V8 was slotted into its new home. It's now sitting on a set of Brett-built engine mounts, with a Marks

Much like the front setup, the rear features three-inch RidePro coils and Superior Engineering remote-reservoir shocks.



A black and white photograph showing the rear of a vehicle with a heavy-duty towbar. A trailer is hitched to the towbar, and a chain is visible. The background shows a grassy field and trees.

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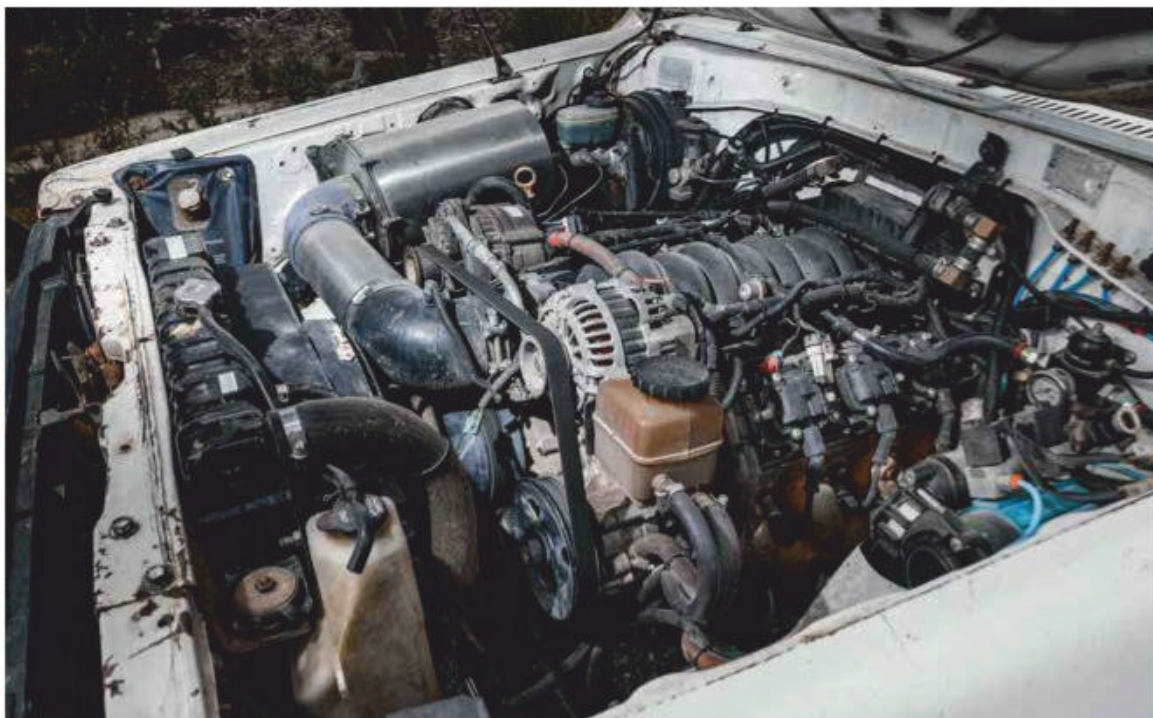
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TOWBAR



Adaptors kit helping it find a home. Brett's mated it to a gearbox and transfer case from a later model VDJ79, which is built from factory to handle a turbo-diesel V8 so should be plenty strong enough to cope with the LS1. From here a MAFless tune has the LS1 running perfectly, with a twin 2.5-inch to single three-inch exhaust giving the 75 its howl. The whole lot sucks in air through a four-inch stainless-steel snorkel.

The wider LC80 axles increase the 75's track by a huge 200mm, but that wasn't enough for Brett. To help keep the 75's body panels off the tight Victorian trees he opted to fit huge 15x10 Gecko steel wheels. Punching in at -44 offset, they bump the track width out even more. He's then wrapped each corner in aggressive 35x12.5R15 Pit Bull Rocker mud tyres.



The hand-me-down tray that was fitted when Brett got the keys had more holes than Swiss cheese, so he fired up the welder again and set to work building something more suitable for the hard wheeling he had planned. Made from a combination of box-tube and chequer-plate it houses a space-case full of recovery gear, as well as a recessed spare tyre to keep the centre of gravity down low without detracting from ground clearance.

From here Brett knocked together rock sliders that continue up through scrub bars into the

Once the 400hp LS1 was slotted into the engine bay, it copped a MAFless tune to get things running smoothly.

OUTLAW
COUNTRY



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01

ACQUIRED TASTE

An interior only a rough-as-guts LandCruiser owner could love.

02

BEEP, BEEP

Road Runner Bullet motor feeds the Warn 8274 high-mount winch.

03

WHICH SWITCH

Gauges monitor vitals. It mightn't be neat, but it gets the job done.

WITH THE HELP OF HIS MATES, BRETT HAS HANDCRAFTED HIS OWN IDEA OF THE PERFECT 4X4

HYDRA-WHAT?

HAVE YOU heard the 'it's not the fall that gets you, it's the sudden stop at the bottom'? A 4x4 suspension is exactly the same, and Trophy Trucks are proof of that. Short of dropping your rig out the back of a plane, there's not much the right suspension can't iron out.

Where a factory bump stop is more or less a hard piece of rubber, the Profender hydraulic bump stops fitted to Brett's rig essentially function like additional shock absorbers; although, rather than control the suspension they become progressively harder as they're compressed.

The result is no sudden 'bang' when the suspension compresses beyond its limits.

It's technology that's starting to make its way into more and more aftermarket suspension kits and we can expect to see more of it down the track.

OUTLAW COUNTRY



Plenty of neddies and a trick suspension set-up makes this HJ75 a weapon on the tracks.



wild comp-spec tube front bar. It not only gives the 'Cruiser an aggressive approach angle, but also houses a built Warn 8274 high-mount winch; it's been braced, the freespool lever pinned, a GiggiePin brake shaft fitted, and 24V is fed into the Road Runner motor thanks to a standalone 24V alternator. There's also a Stedi light bar mounted up on the roof in a custom-built light rack.

If you haven't noticed by now, Brett's rig is basically a road-driven comp truck, and that's all the more noticeable when you swing open the near-on 30-year-old doors. The old dash is

gone, in its place a hand-built one wired with aftermarket gauges to help Brett keep an eye on the V8's vitals. There's a full internal roll cage should things go pear-shaped, and bucket seats sourced from a Nissan Pulsar to keep driver and navigator pinned in place with four-point harnesses.

Say what you want about time spent versus reward, but with the help of his mates Brett has handcrafted his own idea of a perfect 4x4. He's forged his own path and done things his own way, and that's something pre-4x4 outlaws could relate to. **4x4**





CUSTOM

LSA LAND ROVER
DEFENDER 90



WORDS MATT RAUDONIKIS PHOTOS CRISTIAN BRUNELLI

WHITE NOISE

THE CLASSIC DEFENDER 90 DOESN'T GET
ANY BETTER THAN THIS SUPERCHARGED
V8 INTERPRETATION.





AND ROVER'S all-new Defender doesn't drop until later this year, but until then this could be the ultimate expression of the iconic nameplate. A soft-top classic Defender 90 is always going to be a cool ride, even more so the rare NAS Defender that was unique to the American market.

However, California's Fusion Motor Company has cranked the cool dial way past 11 in building this D90 with a 550hp (410kW) supercharged GM V8 engine. And it could be yours!

Land Rover stopped making Defenders back in 2016 and since then prices of the classic models have rocketed skywards, particularly in the case of rare or limited-edition models. Americans got very few Defenders as the agricultural Landies didn't meet essential US

safety standards, so any Defender is rare in the States. This example is extra rare, being left-hand drive and fitted with a factory removable soft-top.

Rarity didn't stop the team at Fusion going to town on the little Landy. Take a look at the company's website and you'll see that it specialises in rare automobiles and top-end builds. The vehicles available there are only limited by your budget, and in the case of this Defender it's available for a cool US\$270,000. All of a sudden that new Defender is starting to sound more affordable.

What makes this Defender 90 so special? Purists be damned; Fusion did a chassis-up resto-mod job on the Defender and shoehorned a monster Supercharged LSA V8 under the bonnet to give it the mumbo to match the macho. This is the factory blown, 6.2-litre GM V8 engine usually found under the hoods of Corvettes and Camaros, or the bonnets of HSV-tweaked Holdens. It's a far cry from any puny

Supercharged Defender 90 soft-top in mint condition ... rare as hen's teeth, and worth a pretty penny to boot.



WHITENOISE



01

STOCK WHEELS

Alloy wheels are factory 18-inch Land Rover pieces wrapped in 33x12.5 Toyo Open Country rubber.

02

CLASSIC STYLE

Custom badging on the rear in classic Land Rover style is a nice touch and is indicative of the detail in this build.

03

SHOW STAR

The supercharged V8 Defender caught our eye at the SEMA Show.

High-riding D90 mightn't be the nimblest of steeds, but with 550-odd ponies it's a compromise you'd live with.

diesel or even a paltry Rover V8 that would have originally been fitted to this vehicle.

Fitting the GM V8 engine to a Land Rover is not as difficult as you might think and there are companies in the USA that make kits specifically for the swap. Back here in Australia, companies like Les Richmond Automotive in Melbourne regularly carry out such conversions to Land Rover Defenders, Discoverys and classic Range Rovers.

To help tame the Defender's new-found 550-odd horsepower and the subsequent boost in performance, the fully refurbished chassis was fitted with extended shock towers to accommodate Fox Racing 2.0 dampers and bespoke coil springs. We reckon you could throw all the suspension in the world at it and still not

tame this high-riding, short-wheelbase beast.

While you're under the Defender to check out that suspension, you might also want to take in the GM 6L80 six-speed auto transmission that backs the LSA mill, the custom-made stainless-steel exhaust system with its side-exit tips, and the oversized stainless-steel fuel tank. The exhaust tips and the aluminium sump guard are Cerakote-coated for looks and protection.

The front bumper is an aftermarket tubular item with inbuilt recovery points and it mounts a small LED lightbar. The headlights have been replaced with Fusion LED units while the other lights, such as indicators and brake lights, have been upgraded with factory optional LED units, giving a more modern look to the classic vehicle. The rear cross-member remains the solid Land

TO TAME A BOOST IN PERFORMANCE, THE REFURBISHED CHASSIS WAS FITTED WITH FOX RACING 2.0 DAMPERS AND BESPOKE COILS



WHITENOISE

01



02



03



01

CARBON COPY

Carbon-fibre bolt-ons are manufactured in-house at Fusion HQ.

02

FOXY STUFF

Fox Racing 2.0 dampers try their damndest to tame the beastly ride.

03

MINT INTERIOR

A leather tiller and electronic dash add modernity to the cabin.

TIGHT FIT

Four leather-covered bucket seats keep occupants secure in the open cabin when the going gets wild.



01



02



**WITH ITS FUSION OF OLD-SCHOOL COOL, MODERN FINISHES
AND BALL-TEARING SUPERCHARGED PERFORMANCE, THIS
LITTLE DEFENDER HAS THE ABILITY TO TURN HEADS**





03



Rover unit with its factory tow point and spare-wheel carrier.

Also adding an air of modernity to the boxy body are the carbon-fibre replacement parts that are smothered all over the pale grey body. Carbon-fibre parts are Fusion's specialty and on the Defender you'll find the lightweight but tough material on the grille, fender vents, mirror caps, dashboard, centre console, door cards, wheel arch flares and sill covers.

The Defender's interior is a mix of old and new. Leather-clad Recaro bucket seats keep the front occupants comfortable, while Land Rover buckets are fitted in the rear. The centre console was recreated in carbon-fibre and

includes spun-alloy cupholders and surrounds for the transmission and transfer case shifters. The carbon-shrouded dash binnacle houses a gauge cluster from Dakota Digital that uses analogue meters to monitor vital signs, while the cloth soft-top ties in with the black and white theme on those rare occasions it is needed in sunny Southern California.

With its fusion of old-school cool, modern finishes and ball-tearing supercharged performance, this little Defender has the ability to turn heads anywhere, be it on Rodeo Drive or in the Borrego Badlands. And it's just a lottery win away from snapping necks Down Under should it take your fancy. **4x4**

01

LIGHT 'EM UP

LED lighting ensures the Prince of Darkness is nowhere to be found on this Land Rover.

02

EAGLE-EYED

Keen spotters will note the use of the later-model 'Puma' bulged bonnet and smaller non-NAS indicators.

03

VITAL SIGNS

Dash binnacle is surrounded by carbon, with a Dakota Digital gauge housed within.





Wild RIDE

DAVE SCHLOSSBERG'S HOT-RODDED JEEPSTER COMMANDO IS ONE OF OUR FAVOURITE JEEPS, SO WHEN THE JEEP GIRLS, ASHLEY AND BRITTANY HILL, TOLD US THEY WERE TAKING IT FOR A DRIVE, WE ASKED THEM TO SHARE THE EXPERIENCE.







THE Cuesta Pass that crosses California's Santa Lucia Mountains is no joke. Climbing from just above sea level to an elevation of 1522 feet, it threads Route 101 over the steep range connecting the town of Santa Margarita with the Pacific Coast north of Los Angeles.

Apparently, our recently acquired Jeep Wrangler YJ which we bought in Santa Margarita smoked its engine climbing the hill. At some points the twisting climb reaches a seven-per-cent gradient and can be quite intimidating; especially when you are driving someone else's precious cargo such as Dave Schlossberg's amazing Jeepster Commando.

But what were we doing driving this stunning Jeep here anyway? Let's go back a few years to begin the story.

SHOW STOPPER

DAVE'S Commando made its debut at the 2017 SEMA Show in Las Vegas and I instantly fell in love with it. I jumped in the driver's seat at the Las Vegas Convention Center and told my partner Fred Williams (of the online show *Dirt Every Day*) how much I loved it. It had undergone a complete transformation since I previously saw it, when Dave purchased the original vehicle.

Dave Schlossberg, founder of Synergy MFG, a manufacturer of high-end automotive performance components, found the Jeepster in the small town of Placerville, California, just outside the famed Rubicon Trail. I remember when he first got the yellow Jeep it even had a gold-miner hood ornament which is so iconic of Placerville, a town whose origins

date back to the 1848 Gold Rush.

The 1971 Jeepster Commando didn't run and sat with a cover on it at Dave's shop on California's Central Coast for a while. I would always ask him if it was running, because obviously I wanted to drive it.

I love the more unique vintage Jeeps such as the early Willys Wagon and the Jeepster Commando. For years Brittany and I have been talking about purchasing a 'heritage' Jeep; something iconic, classic and stylish, with a story. We really loved the idea of something cool from the 1960s or '70s, but everyone we talked to warned us about the amount of work involved with maintaining a vintage Jeep.

When I first saw Mopar Underground's 1962 Willys Wagon at the Easter Jeep Safari, I fell in love with the aesthetic and I followed the Wagon through Moab, Utah, in my JK Wrangler. The Willys Wagon had been updated with the original chassis, coupled

On the Synergy booth at SEMA 2017. "Can I please have one of these Fred?"



Up front, Synergy MFG employed Baja Designs LED headlights and a Warn winch.

AS SOON AS I GOT IN THE JEEPSTER, I FELT AS IF I WAS HANDED VERY PRECIOUS CARGO. DAVE SAID STERNLY: "DON'T MESS IT UP!"



The interior maintains its vintage flair thanks in part to classic-look AutoMeter gauges.



with a Jeep Wrangler TJ Unlimited drivetrain. The idea was maintaining a vintage look, but for it to steer, stop and perform on road (and off) like a modern Jeep.

NEW OLD

DAVE'S Jeepster follows a similar theme, with a classic yet restored vintage body on a modern chassis and driveline to improve its driveability and performance on- and off-road. In short, it's a 1971 Jeepster Commando on a shortened JK Wrangler frame with an impressive powertrain. The engine is a 6.0L LQ4 GM V8 backed by a 4L80E transmission custom-built by GearStar and an Advance Adapters Atlas 4.3 transfer case. The diffs are the donor JK Rubicon's Dana 44s with the factory e-lockers. Naturally, the Jeepster rides on Synergy Manufacturing's Stage 3 suspension kit, using 50mm raised front and 25mm raised rear coils and Fox Racing 2.5-inch DSC shocks.

I recently bumped into Dave and told him I wanted to take his



Jeepster Commando on an adventure through California's Central Coast. After twisting his arm – a lot – he agreed to let us take one of his favourite Jeeps to the beach and over the low mountain pass from San Luis Obispo to Paso Robles. Luckily my sister Brittany came out for the adventure, because it was like nothing I had ever driven before. As soon as I got in, I felt as if I was handed very precious cargo, as Dave said sternly: "Don't mess it up!"

A short time into the drive, Fred called in a panic. He had no idea we borrowed the Synergy Jeepster and he needed us to rummage through a pile of parts in his shop, which is on the other side of town. This meant one of two things: either I was going to have to tell Dave I was too scared to drive his Jeepster over the Cuesta Pass and take it back to him; or Brit was going to drive up the extremely steep grade. Luckily Brittany isn't afraid of going uphill, especially in a fully capable Jeepster with a powerful V8. Dave assured us he built the Commando to take on mountain passes and more, and that steep grades and sharp curves were

THE REFURBISHED JK CHASSIS, SYNERGY SUSPENSION AND 35-INCH NITTO TRAIL GRAPPLERS MAKE IT EFFORTLESS TO DRIVE



Ashley and Brittany love their Heritage Jeeps, but could they own one?



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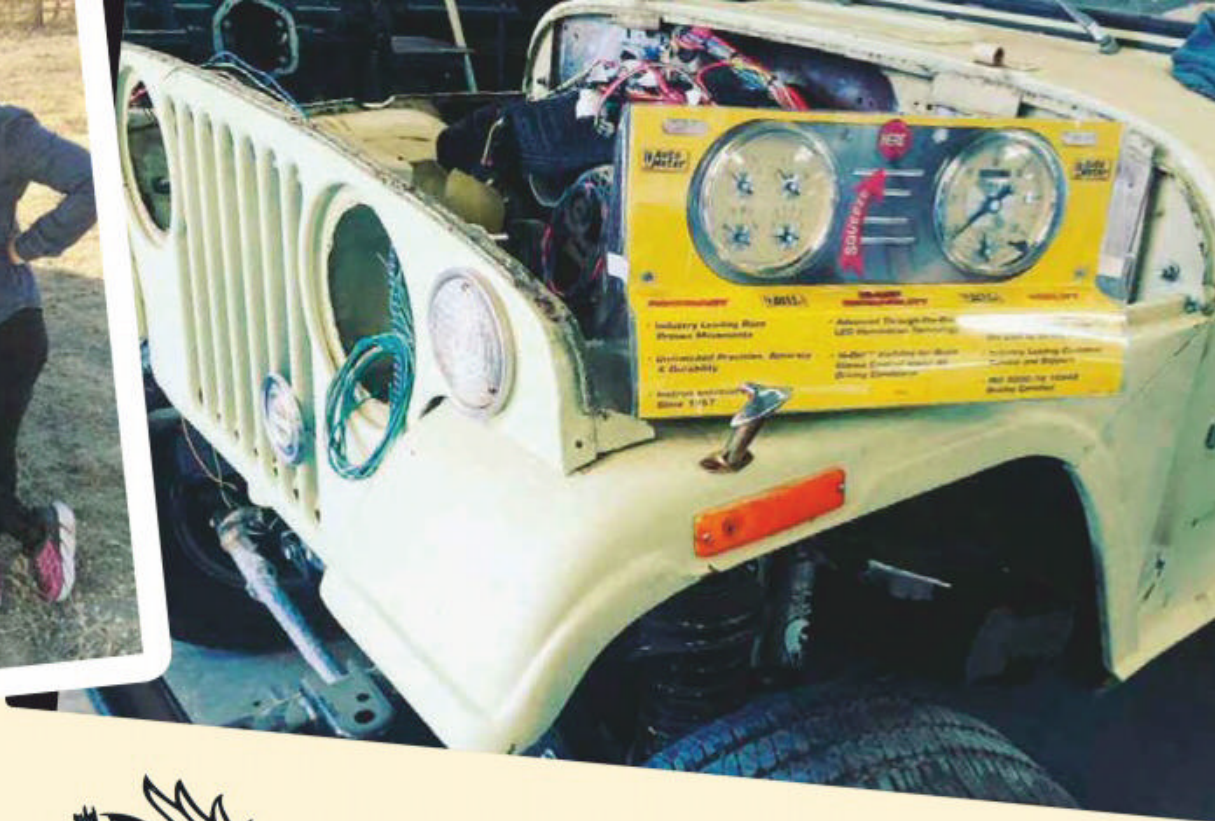
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nothing to be scared of. I shouldn't have been worried. The refurbished JK chassis, Synergy suspension and 35-inch Nitto Trail Grapplers make the Jeepster effortless to drive, and the powerful 6.0-litre V8 climbed the pass without raising a sweat ... but it did use a bit of fuel.

Instead of an intense grade like the eastern approach, the descent to the coast is gradual but much longer. As we went down, Brittany asked nervously how much longer the hill was, and told me that the fuel was running out. We made it to the service station and, when topping up, discovered one of the quirks of driving a vintage vehicle: they all have a unique way of being filled up. After finally figuring out that the pump handle needed to be upside down, we put in a few litres and headed onwards towards Synergy Manufacturing's head office.

Dave sent us a text asking, "Did you wreck my Jeep yet?" I couldn't wait to return it to him pronto as I had never been so nervous about being in someone else's Jeep. As the sun was rapidly setting, we pulled off to take a breath and relax for a quick minute before driving back to Synergy. Our plan was to

return it before dark, but the sun sets quickly in a USA winter, and about 10 minutes later it was completely lights out.

Pulling into Synergy in the dark, I couldn't have been more excited to jump back in our rental car. We had a fabulous time, but we are learning that owning a heritage vehicle requires

a lot of patience, flexibility and understanding. Just recently, as Fred was muscling in the replacement engine for our Jeep Wrangler YJ, he said, "no more Jeeps that aren't running." It's true, because you really don't know what worked, what has been replaced, or what type of surgery the vehicle needs.

I really love a stock classic heritage vehicle, but I also love the modern conveniences and power from a new vehicle. There's really something to be said about the time and energy that engineers spend on crafting a vehicle the first time around. I wouldn't say that I never want to own a heritage vehicle, but there's so much more to learn in the meantime! Stay tuned as we continue to work on our version of a heritage Jeep ... our 1992 Jeep Wrangler YJ. **4x4**

A challenging aspect of the build was adapting the '71 Jeepster body to the modern chassis.



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4X4
AUSTRALIA



EXPLORE

DIRK HARTOG ISLAND,
WESTERN AUSTRALIA

WORDS & PHOTOS ANDREW GREGORY

ISLAND ADVENTURE

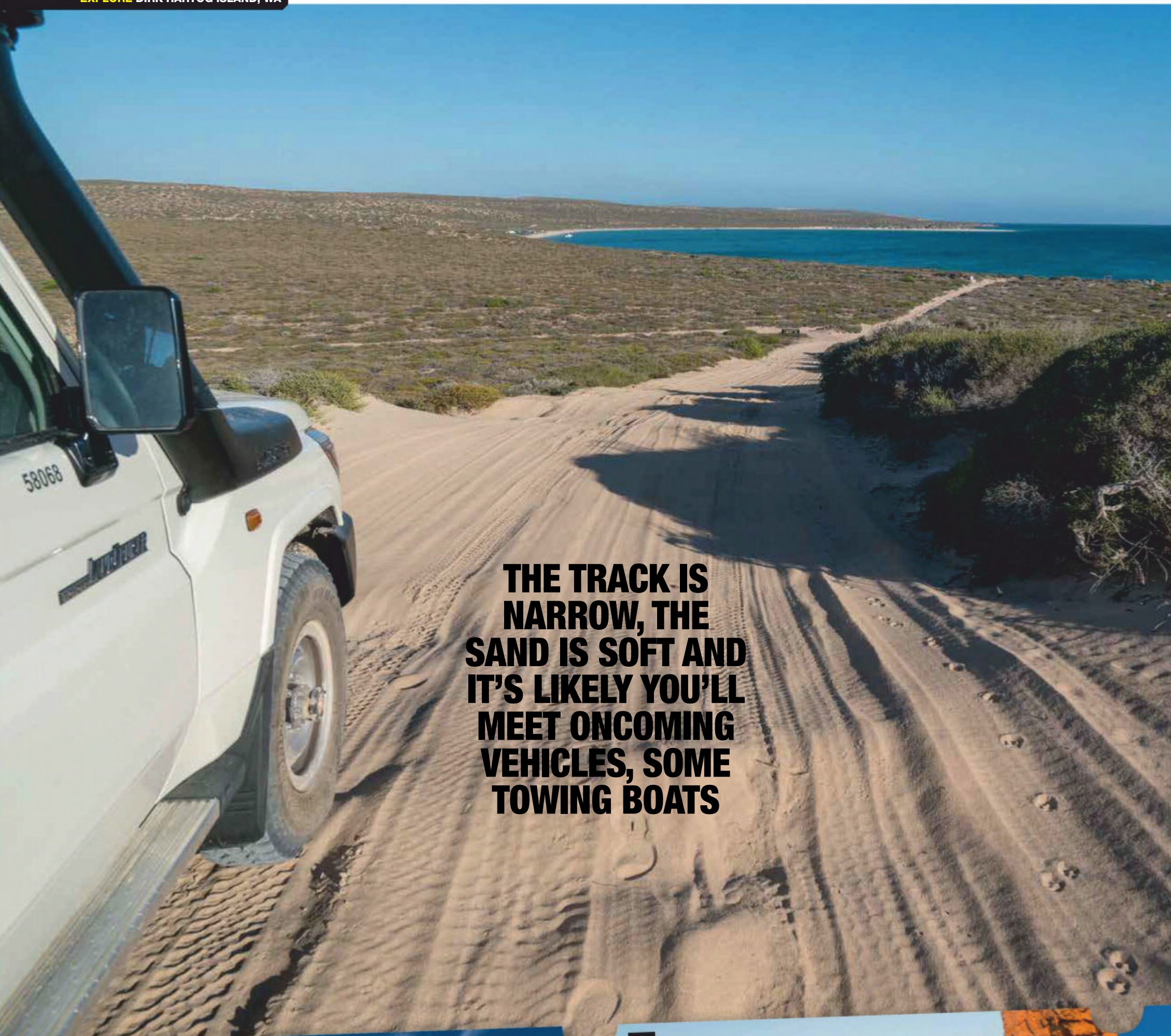
SOME DESCRIBE DIRK HARTOG ISLAND AS THE FRASER OF THE WEST COAST, BUT THIS EXCLUSIVE WESTERN AUSTRALIA 4X4 DESTINATION OFFERS A REMOTENESS THAT ITS QUEENSLAND COUSIN SIMPLY CAN'T MATCH.

AFTER SAILING beside the treacherous Zuytdorp Cliffs and the rugged west coast, Dirk Hartog anchored in Turtle Bay, a sublime anchorage sheltered from the southern swells. Here he climbed the dunes to consider the view from the top of the cape; to the north and east he saw only the vast open ocean and must have assumed he had reached the western edge of the great South Land, or that he was on an island.

Standing on the same point as Dirk Hartog some 400 years later, on an extremely hot and clear day, I peered east and caught the faintest glimpse of a strip of orange floating on the horizon. Having been to Cape Peron, I knew this mirage on

the ocean was orange dunes, some 40km away. If Dirk Hartog had glimpsed this phenomenon all those years ago, I wonder if he would have set sail to explore Shark Bay to the east. Instead, after three days, he left a plate with an inscription on what is now aptly known as Cape Inscription, and left for Batavia.

Dirk Hartog Island (DHI) is a finger of land that protects Shark Bay. The island is 76km long and averages about 11km wide, but just 3km wide at its narrowest point. It's the largest island in Western Australia, and it has a diverse coastline with 200m-high cliffs, blowholes, sand dunes, coloured lakes and calm bays that offer a myriad hue of blues. The abundance and variety of fish around the island is incredible.



**THE TRACK IS
NARROW, THE
SAND IS SOFT AND
IT'S LIKELY YOU'LL
MEET ONCOMING
VEHICLES, SOME
TOWING BOATS**



1. The barge at Cape Ransonnet is our ticket to DHI.
2. Cape Inscription is rich with historical significance.
3. It's not remote country without an emblematic windmill.
4. Dangling a lure at Quoin Head.

Our camp at Steep Point could be confused for a makeshift settlement.

The camping on DHI is superb – and exclusive – with no more than 20 vehicles permitted at any one time, and visits must be pre-booked. It's possible to fly or barge over to the island from Denham, but if you want to take your vehicle across you will have to put it on the barge at Steep Point.

The Overlander Roadhouse, 700km north of Perth on the North West Coastal Highway, is the turnoff point for Shark Bay, and while it's possible to reach Steep Point from here in just a few hours, there are a few destinations on the way that are worth extending your trip for.

About 40km from the turnoff is Hamelin Pool and the stromatolites. A boardwalk here allows you to look at these ancient lifeforms, representative of life some three billion years ago. Facilities here include a small shop and a caravan park, and there's the old telegraph station that houses artefacts from the early days of settlement.

The bitumen ends about 20km west of the turnoff to Denham and Shark Bay. A gravel road leads out to the salt works at Useless Loop, which is on the Heirisson Prong, a peninsula that juts out into the waters of Shark Bay. Useless Loop is a company town with a solar salt mine, and while you can't see much of it as you drive by, these salt beds look stunning from the air with pools of different colours. After Useless Loop you reach a junction; turn right for Steep Point and left to

False Entrance, which is a gap in the Zuytdorp Cliffs. This gap was named False Entrance after being mistaken for South Passage, and the track to this site is well-formed but turns to soft sand as you approach the beach. This is an ideal spot for fishing and beachcombing, and there's plenty of ocean life about including sharks and manta rays. There are also blowholes in the cliffs and, for those who want to spend the night, informal camping.

At the base of the hill on the Steep Point track is a sign that reads "4WD access only and please deflate your tyres to 20psi". The climb here is the worst section of the track; you have to climb up and down dunes and the track itself is very narrow, the sand is soft and it's likely you'll meet oncoming vehicles, some towing boats.

The track winds through picturesque dunes and eventually you reach the beach at South Passage. Here you can check in to the Ranger's House or book your camping for the night. There are many campsites along the beach here at South Passage, the water is clear and blue, and the fishing is great. Pull out a chair and sit back with your rod in the water; I caught a massive spangled emperor from my campsite on the beach.

The barge, which can carry a 4x4 and camper trailer, pulls up at Blackies Beach about 600m west of the Ranger's House. The crossing to DHI is only about 15



1



2



minutes, but it's enough time to get out and have a look around. The barge lands at Cape Ransonnet and by the time you arrive here you should have already booked your campsites. There are national park campsites around the island, which are all bush or beach camping.

The southern part of the island has some tracks leading to amazing features: near Cape Ransonnet the white dunes meet the sparkling blue waters of South Passage; and on the west coast is Surf Point, where you can take in a magnificent panorama of the island from the rocky headland overlooking the surf and Steep Point on the mainland. You can walk through the shallows here and watch the amazing marine life, including hundreds of small sharks.

Farther north the track heads over the dunes to some tall and dramatic cliffs, and there is a giant blowhole nearby that in huge swells sends spray towering overhead. The rock shelves are good for experienced fishers.

Just north of the Homestead is Tetrodon Loop, which is a bay that's encircled by Quoin Bluff South and Notch Point. Tracks up to these points provide high views across

Shark Bay. From Quoin Bluff we watched small sharks circle a cormorant roost, and you will often see tiger sharks cruising in the shallows as well. To the west are some of the largest dunes on the island, as well as Cliff Lookout which is the highest point on the island.

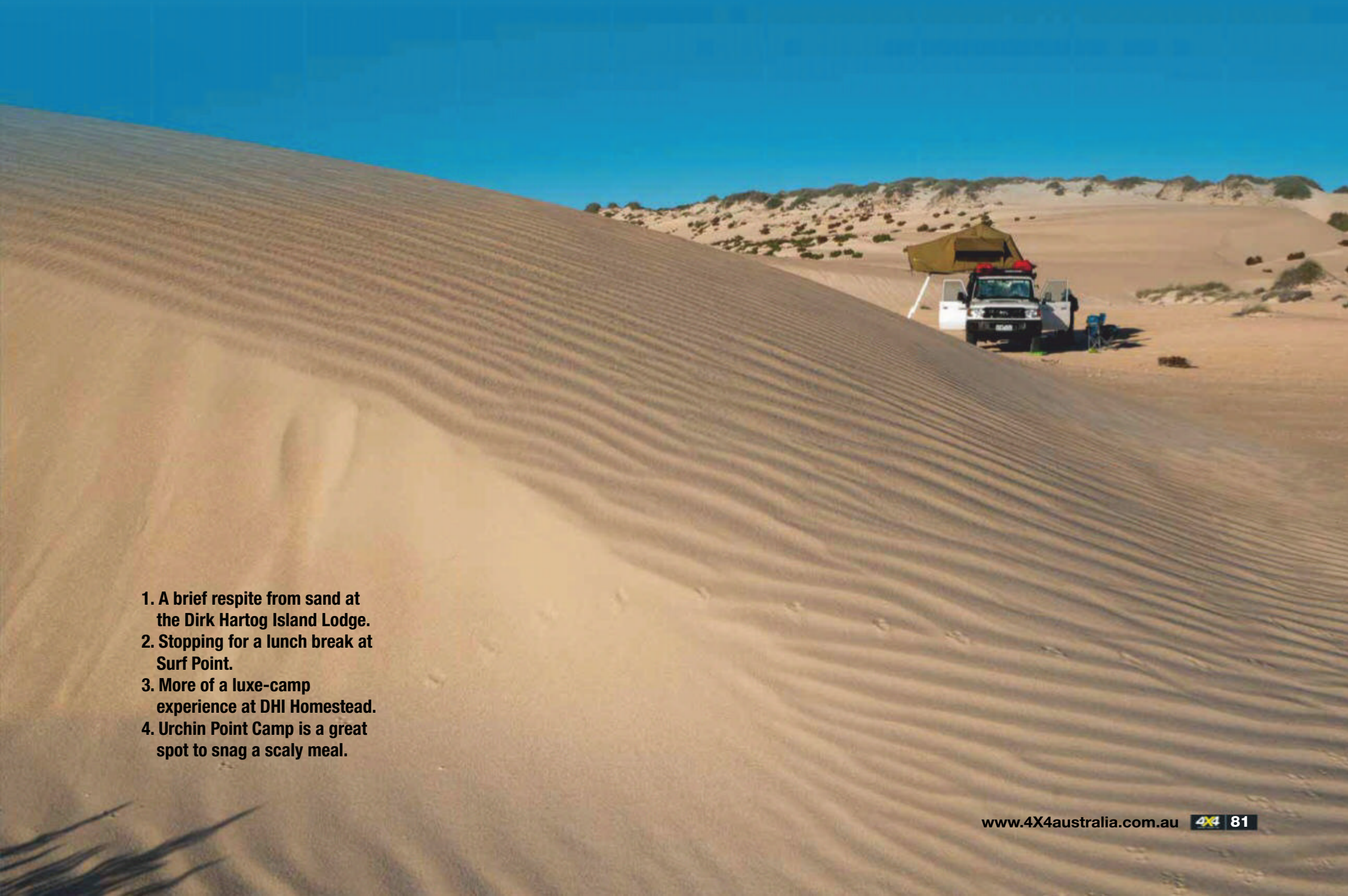
There's beachside camping at Homestead Beach, with facilities and a camp kitchen. Most of the campsites are in the northern part of the island, so it can be worth staying at Homestead Beach for a while if you want to explore the southern section. It's a great place to stay before leaving the island, as many return transfers are in the morning. The homestead also offers accommodation at the Ocean Villa, which is a self-contained cottage at the water's edge, or in the Eco Lodge, which is the original homestead and has six rooms, all fully catered. It's a stunning spot right on the beach – one of those first class eco-stays that attracts people wanting to escape the ordinary.

From Dirk Hartog Island Lodge the track winds up the east coast of the island and is mostly a hard surface with some corrugations and soft patches. It will take between three and four hours to reach Cape Inscription from the

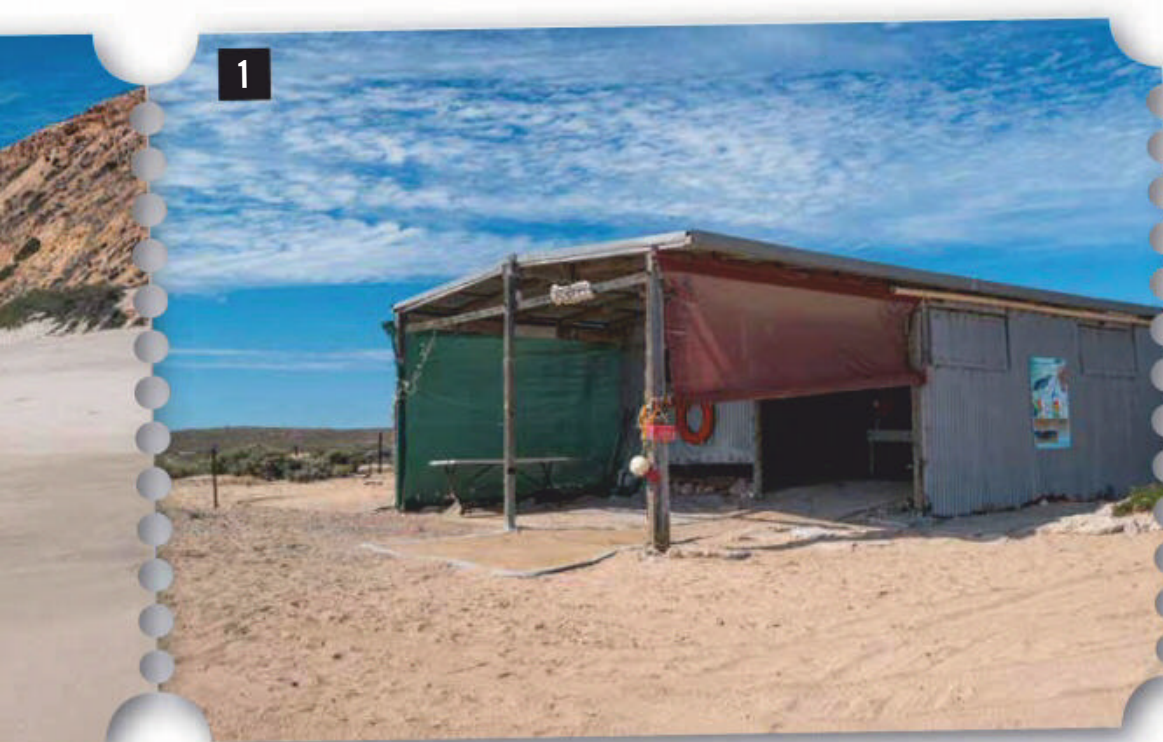




TO THE WEST OF QUOIN BLUFF ARE SOME OF THE LARGEST SAND DUNES ON THE ISLAND, AS WELL AS CLIFF LOOKOUT WHICH IS THE ISLAND'S HIGHEST POINT



1. A brief respite from sand at the Dirk Hartog Island Lodge.
2. Stopping for a lunch break at Surf Point.
3. More of a luxe-camp experience at DHI Homestead.
4. Urchin Point Camp is a great spot to snag a scaly meal.



barge landing, and on the way you will pass some amazing sights including red and pink salt lakes.

The lighthouse and keeper's quarters are among few manmade features on Dirk Hartog Island. These were built at Cape Inscription between 1908 and 1910, and here you'll find a plate that commemorates Dirk Hartog. On the beach below are the remnants of an old jetty.

The headland is great place to explore; below the lighthouse there are interesting rock pools and to the east you'll find the stunning expanse of Turtle Bay that stretches about 6km towards Cape Levillian, the north-eastern point of the island.

About 20km south of Cape Inscription, on the west coast, is Mystery Beach. This is a great day trip from the northern campsites, and the spectacular drive south winds through dunes near the beach. Mystery Beach was named after a mystery shipwreck, and it's littered with natural sponges, driftwood and all sorts of flotsam. The sand on the beach is very soft, and impressive dunes near the cliffs make for interesting walks.

CAMPING

THE NATIONAL park campsites on the island are spread between the east and west coast, and they are all near

the water and offer very different experiences. The winds are predominantly from the southwest so the east coast is quite sheltered, offering flat water in shallow bays and making it good for paddle boarding, snorkelling, kayaking or putting in a small boat. The west coast is rugged with wild swells and scenery to match, mostly rocky shorelines and spectacular fishing. The national park campsites have no facilities.

Turtle Bay Campsite is about 4km east of Cape Inscription. It's a single site right on the edge of the cliff above the eastern end of Turtle Bay, which is the largest loggerhead breeding colony in Australia. In summer the turtles nest on the beach, and even as late as April there are still stragglers coming ashore. There is a short but steep track down to the water and it's a great place for a beach walk and a swim. It's mesmerising just looking out to sea, waiting to spot dolphins, whales or sharks.

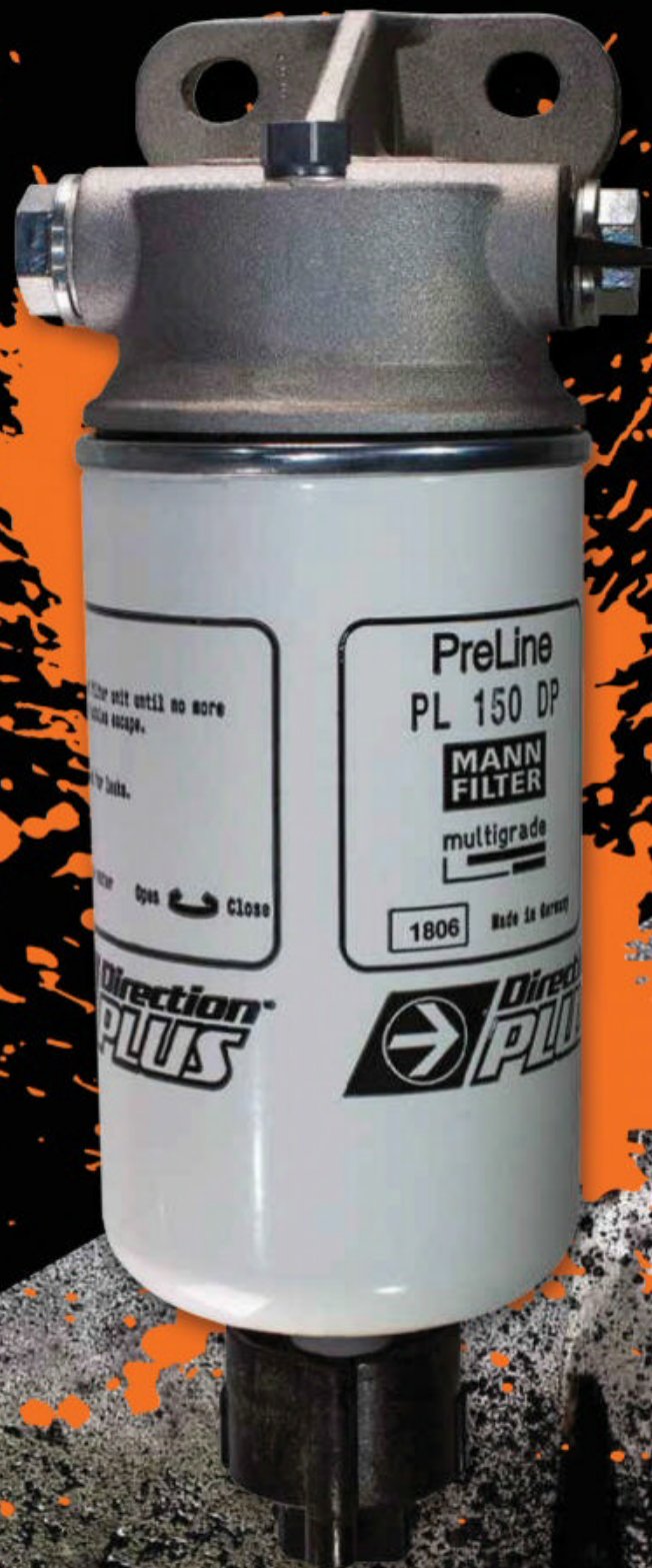
Urchin Point Campsite is about 4km from Cape Inscription on the west coast. The site is on a platform cliff shelf above the ocean. There is a shed/shelter here which provides shade and protection from strong winds, and a small stretch of sand is good for fishing with floats or lures due to the rocky bottom. There is a left-hand surf break here as well.

1. Shed at Urchin Point Camp provides a great base.
 2. The stunning Turtle Bay stretches for six kilometres.
- Main: Scenic drive to discover Mystery Beach.





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The geological wonders tracing the beach at Cape Inscription.

Construction of the Cape Inscription Lighthouse began in 1908.

The Block Campsite is on the west coast about 6.5km from Cape Inscription. It's named after a large and bizarre rock that's shaped like a large cube, which was washed up in a tsunami. The site is set on a rock shelf that drops steeply into the ocean, and it's well-suited to cliff fishing but not for swimming as the swells break right onto the rock ledge. The site has a shed and can be booked for up to four vehicles. If fishing isn't your main interest it's still a good site where you can make a more permanent type of camp, and is not too far from Cape Inscription.

Dampier's Landing Campsite is about 6.5km east of Cape Inscription. It's a single site for up to three vehicles and is positioned right near a beach on the west coast. The sand is part of a spit that points out at Cape Levillain, and is pure white and very fine, hence very soft for beach driving and not recommended for trailers. This is where William Dampier landed in 1699 and named Shark Bay, and there is a plaque here

Cape Inscription is historically significant as it's one of the first known landing sites of European explorers.

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Travel Planner

IT TAKES quite a bit of commitment to get to DHI, and the people who do often make return trips. While you can enjoy just a few days here, if you take a week or more you'll be able to explore the north and south of the island. I found it easy to travel simply with a rooftop tent, and as it's one of the best fishing locations in Australia, you can always catch a fish or two to stretch your supplies.

WHERE: On the western edge of Shark Bay, 700km north of Perth. Access is from Steep Point, a three-to four-hour drive from the highway. From here take the 15-minute barge across South Passage to DHI.

DRIVING CONDITIONS: Many of the tracks on DHI are well-formed but there are soft sections, particularly on the entry and exit points near the barge, and on the beaches. Access to Steep Point and DHI is all sand so it's only suitable for 4x4s. Tyre pressures need to be dropped, and there are some very soft sections out to Steep Point and on DHI, so recovery gear such as tracks and shovels should be carried. You need to be fully self-sufficient.

CAMPING: Camping on the island is all basic – there are no facilities – and you need to bury your waste. There is no water, so you must bring all supplies if camping in the national park. Some sites are exposed so you need plenty of water and shade. Be prepared for strong winds. There is camping available at Homestead Beach, with some facilities.

PERMITS: Camping must be pre-booked through the website. Accommodation at the homestead also needs pre-booking. The barge transfers also need to be pre-booked.

CONTACTS:

See www.dirkhartogisland.com for camping permits and barge transfer bookings.

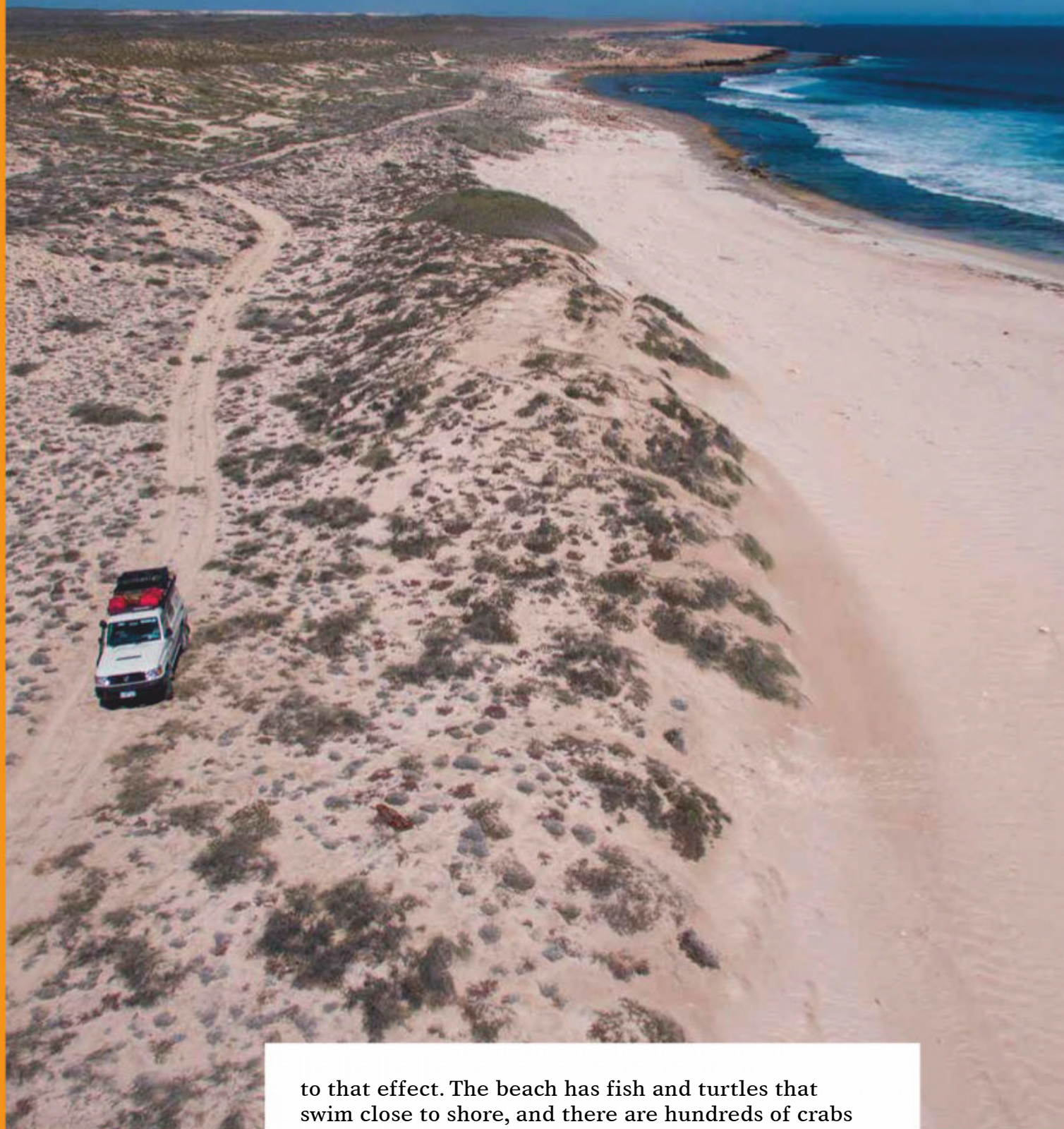
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Website: www.sharkbay.org;
www.dpaw.wa.gov.au

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IT'S THE REMOTENESS AND EXCLUSIVITY OF DIRK HARTOG ISLAND THAT MAKES IT WORTHY OF ITS BUCKET-LIST STATUS



Main: Before tackling Mystery Beach Track, drop tyre pressures!

to that effect. The beach has fish and turtles that swim close to shore, and there are hundreds of crabs scurrying about.

Withnell Point Campsite is about 16km south of Cape Inscription on the east coast. It's a sandy point on a large bay and can accommodate three separate group bookings. It's right on a flat, shallow and safe beach, and it's great for small kids and beach fishing.

Sandy Point campsite is about 32km south of Cape Inscription on the east coast. It's near a flat, sandy beach and is good for beach fishing or launching a boat. Offshore there's a coral reef that's located in a sanctuary zone.

Quoin Head is located on the western side of the island near it's midpoint, and it's a 17km drive across




the island from Sandy Point. The campsite is on a rocky ledge above reefs and shelves, and while excellent for fishing it's not easy to access the water. It's near Charlies Harbour which has inspiring cliff formations, and you'll be able to spot an osprey nest on top of one rocky outcrop. Campers here try their luck with balloon fishing for pelagic species like mackerel, as the winds will take your line out into bay

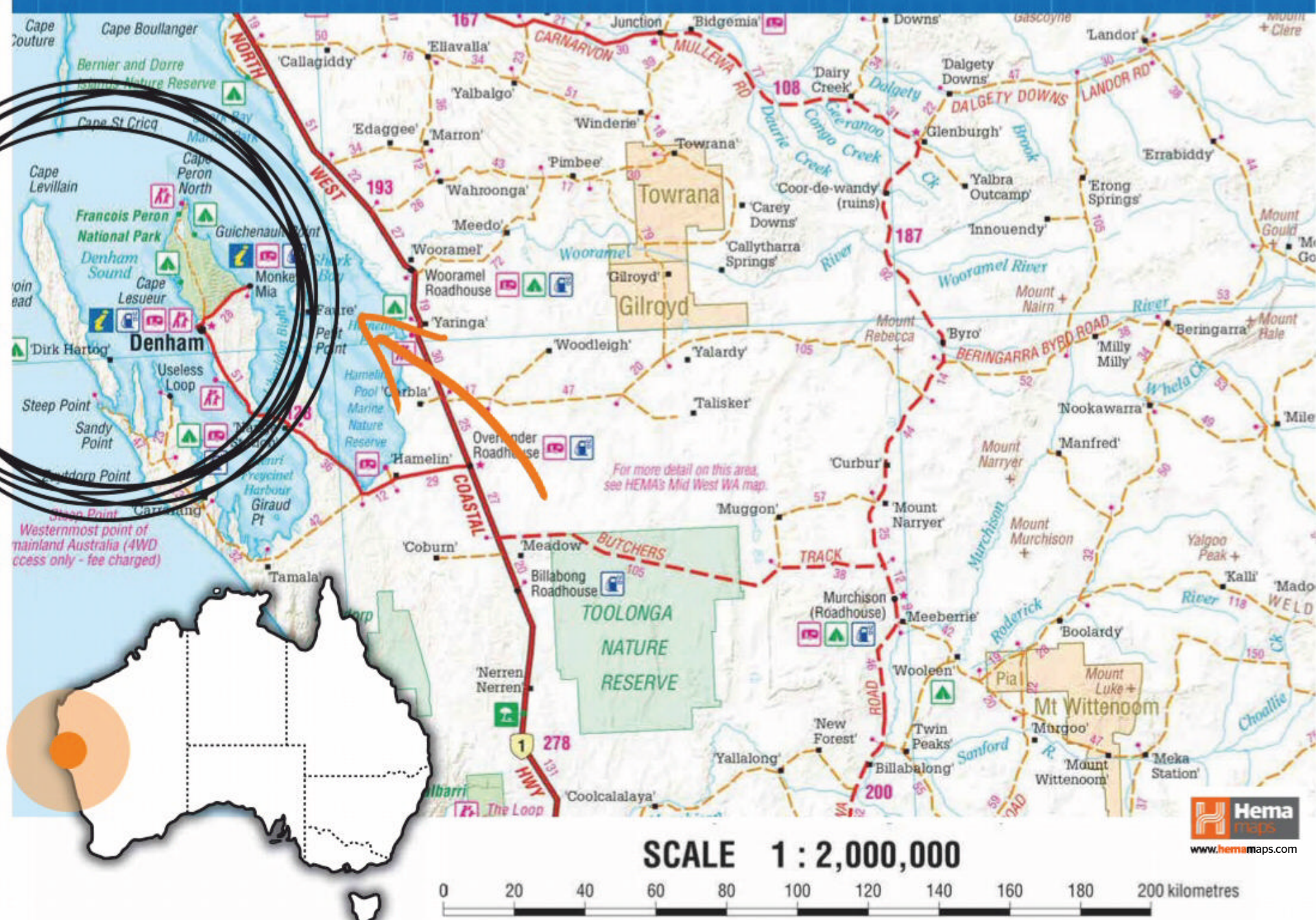
Louisa Bay campsite is on the eastern side, another 10km south of Sandy Point. A single site that can take up to four vehicles, the bay has a sandy beach with shallow waters and is a great sheltered site suitable for fishing and snorkelling. You can launch small boats and kayaks from the beach here, and there are coral reefs offshore with reef fish.

FRASER COMPARISONS

IT'S INEVITABLE that Dirk Hartog Island will be compared to Fraser Island; both are amazing 4x4 locations and DHI is definitely the west coast equivalent. However, it's the remoteness and exclusivity of DHI that makes it worthy of its bucket-list status. It's a big island with diverse opportunities and the marine life here is amazing and very easily seen, with sharks on the west coast and dugongs on the east.

You feel the remoteness here, too; although, you'll frequently spot sea eagles, osprey and other birdlife. DHI recently became a Wildlife Ark, with native species released after feral cats and goats were culled. In the future, a camping trip here could also include sightings of rare animals like the chudditch, dibbler or boodie. 

DIRK HARTOG ISLAND, WESTERN AUSTRALIA





BEAUTIFUL BINNS **PART 2**

DAVENPORT RANGE AND GREGORY NATIONAL PARKS ARE HIDDEN WONDERS, VISITED BY FEW BEFORE BINNS TRACK WAS CREATED. THEY OFFER SOME OF THE MOST MAGICAL SCENERY YOU'LL EVER EXPERIENCE.

THE CHANGE is immense – the blacktop where savage corrugations once reigned supreme is now part of the Plenty Highway and will never be the same again. That was the feeling as we drove the section from Gemtree to Harts Range on the ‘Outback Highway’. Fuel was needed, and needed badly, as Gemtree had imposed restrictions due to the fuel truck being late.

Our timing couldn’t have been worse as the bell had rung and all the school kids from the community were packed into the store, stocking up on snacks. With fuel tanks finally filled, we continued along the Plenty for only a short stint before turning north and back onto the dirt. The sandy track is as wide as they come out here, and a grader must have been run over it recently, it was so smooth. As you cross the expanse of the Plenty River, check out Harts Range filling your rear-view mirrors. This is stunning country.

A nice detour is to check out Boxhole Meteorite Crater, a short drive off Binns Track via a station track. The sign for the turnoff is small and easily missed but the rewards are well worth it. An old fella and his faithful companion were relaxing in the shade and it didn’t feel right to disturb them, but the crater beckoned for a quick viewing.

Another fantastic detour is to Tower Rock. Having misread the map, we didn’t turn off to pass the station-stay property at MacDonald Downs but instead followed a little-used track. Driving directly into the sun made it hard to see the gates and we arrived at Tower Rock just as the sun sank below the horizon, quickly setting up camp between some rocks to escape the wind.

The next morning we retraced our steps along New McDonald Downs Road to the Arapunya Road. From here, turn north and head towards Derry Downs and watch the country change again; spinifex, desert oaks,



1. Coulter Waterhole was a nice surprise.
2. Wedge-tailed eagle content after 'roo for tea.
3. Kitted Colorado LT trailing the lead vehicle.



ghost gums, desert pines and wattles. The road surface also changes from sand and bulldust to stones and clay; it all makes for a great drive and you almost forget the remoteness.

Just prior to Derry Downs, you'll find a sign directing you along a bypass track. Having crossed the expansive Bunday River, the track then closes in and it's slow-going as you climb a small rocky range. Throw in some bush pinstriping and this is what remote desert travel is all about. Once you reach the cattle grid, the track becomes sandy and the country opens up again as you drive through spindly eucalypts, spinifex and gidgee. Upon reaching the Welere Road the sandy track continues

and the going is good, but take care on the corners as we nearly had a head-on collision with a Pajero full of locals who were in a rush to get somewhere.

Once you reach the T-junction and turn right, the 19km of corrugations to the Sandover Highway are bone-jarring, but once on the wide-open desert highway the 27km to the Elkedra Road is fast-going. If with Telstra, your phone will start pinging as you pass Ampilatwatja and coverage will last until you're on the Sandover-Murray Downs Road. The next 75km is generally good going, and recent rain meant the grader had been out and the landscape was green and colourful. At

We stumbled upon Coughs Bluff Lookout by chance, thanks to the Hema HX-1 unit.

TAKE CARE ON THE CORNERS, AS WE NEARLY HAD A HEAD-ON COLLISION WITH A PAJERO FULL OF LOCALS WHO WERE IN A RUSH TO GET SOMEWHERE





most other times, though, expect corrugations and bulldust. The turnoff to continue along Binns Track towards Iytwelepenty/Davenport Range National Park is well-signposted. Once through the gate (leave it as you find it), the track narrows and speeds are reduced.

Closing in on the Davenport Range, the scenery is spectacular and a highlight of Binns Track. Spinifex and ghost gums dominate the rocky hills, the stony water crossings are dry and the colours are green, orange and blue. Coulter Waterhole will surprise you, while offering some shade and a place to dip your toes. A gap in the range forms a large valley and a drove of donkeys passed as we neared Hatches Creek. Once past the turnoff to the Frew River 4WD Track, wide-open plains take over and it's cattle country out here.

The 9km track to Old Police Station Waterhole offers some amazing landscapes, especially when golden hour kicks in. The campground along the permanent waterhole is well-spaced-out with fireplaces nicely dispersed and the perfect place to roll out a swag for a few days. With the sun gone, you'll enjoy some relief from the bush flies – attracted by the cattle and the water, they can be frustrating.

When it comes to a remote 4x4 track full of pure awesomeness, the 17km Frew River 4WD Track is hard to beat. There are a couple of tricky climbs where wheel placement and right boot control is important, a few tight sections, and it's overgrown in places, but the vistas are stunning. As you drive up and down the escarpments you'll pass spinifex, ghost gums, wildflowers and termite mounds. Allow

With tight tracks and tricky terrain, the Iytwelepenty is one of the most spectacular NPs.





WHEN IT COMES TO A REMOTE 4X4 TRACK, THE 17KM FREW RIVER 4WD TRACK IS HARD TO BEAT

a good three hours; you'd hate to break something out here.

There's camping at Whistleduck Creek, and the road leading from Old Police Station Waterhole to the north-western section of the Davenport Range handles more like a highway in most parts. The scenic 24km trek through pastoral land into Whistleduck Creek camping area was in good condition, but beware of cattle. There are two distinct camping areas, with several sites in each one. A couple of walks are also available; one along the creek from the day visitor area to Irrmweng Rockhole, the other, for more experienced hikers, an unmarked trail north along the creek to Injaridan Rockhole.

Retracing your steps back to Kurundi

Road, Binns Track continues another 68km before reaching the bitumen of the Stuart Highway. The road conditions along this stretch will vary, with corrugations aplenty in some sections. You'll reach a small stretch of blacktop with a 60km/h speed limit as you pass Kurundi Station, a cattle property popular with fossickers. The road winds through the range before straightening out as you close in on the Stuart Highway.

If you turn left, Boney Well Rest Area is a good spot to put some air back into your tyres, as there's a lot of highway driving before you reach the next off-road section of Binns Track. The Karlu Karlu/Devils Marbles Conservation Reserve is only 15km south of here and well worth the slight detour. There's cheap camping available here, and if you have the time it is well worth watching a sunset or sunrise over these gigantic boulders.



When the kapok flowers bloom, it means the saltwater croc eggs are hatching.





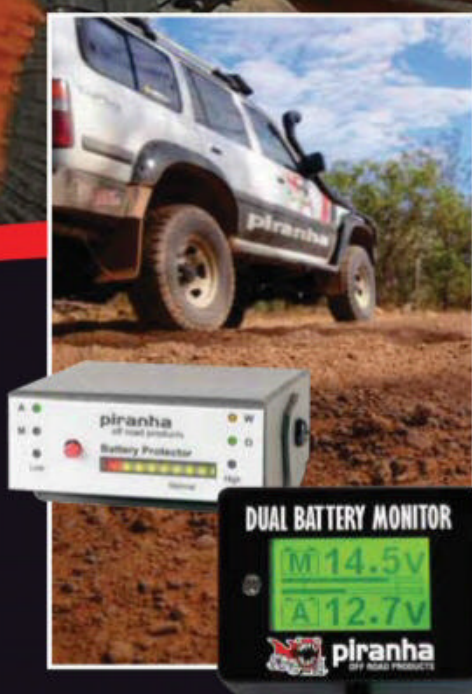
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The escarpments rise high above the old ford on the Victoria River.

It's a fair hike to Katherine from the Devils Marbles via Tennant Creek and Daly Waters, but an overnight stop at the Mataranka Homestead is a must. Here you have the opportunity to soak away the dust in the extremely popular thermal springs, before quenching your thirst watching the nightly entertainment.

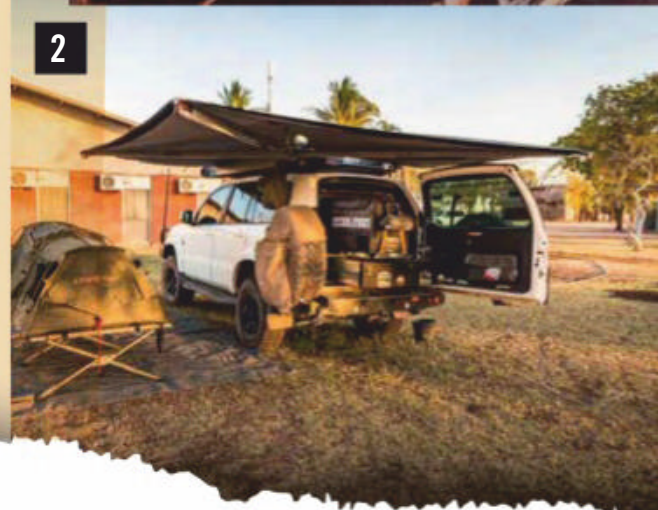
You can top up, stock up and get any mechanical work done at Katherine. From here, jump on the Victoria Highway and head west. It's 289km to Timber Creek and on the way you'll get an introduction to the northern section of the Gregory National Park around Victoria River, where massive escarpments dominate the skyline. There's a free campsite at Sullivan Creek and the old Victoria River crossing can be found down a signposted, dusty then rocky track. Be croc aware, as the salties could be about.

Timber Creek is the northern jump-off point for Gregory Range National Park. There's a caravan park attached to the

Timber Creek Hotel that's a good place for an overnigher, and fuel is available, the last until Top Springs.

Not far from Timber Creek, on the Kununurra side, is a track that leads down to an old boab, blazed by the expedition artist who was with explorer Augustus Gregory when he visited the region in 1855-56. The tree is also a sacred site for the local indigenous people, a place they loved to camp at but also for the 'young man' ceremony that was performed here. On the way back into Timber Creek is a turnoff on the right that will take you up to a couple of lookouts providing fantastic views of the Victoria River and Timber Creek.

From here it's time to tackle the last stage of Binns Track and spend a couple of days exploring Judbarra\Gregory National Park. The Bullita Access Road leads to a great campsite near the old homestead and stockyards. It's only 47km on a gravel road, but it's worth reducing tyre pressures



1. Airing up for the last time, on the Stuart.
2. Tip-top camping spot behind Top Springs Hotel.



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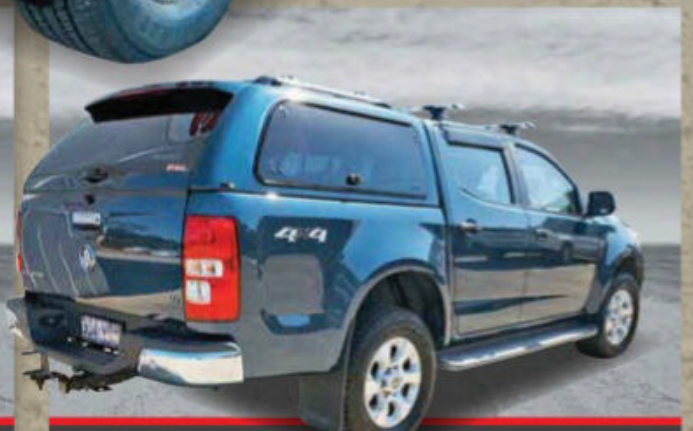
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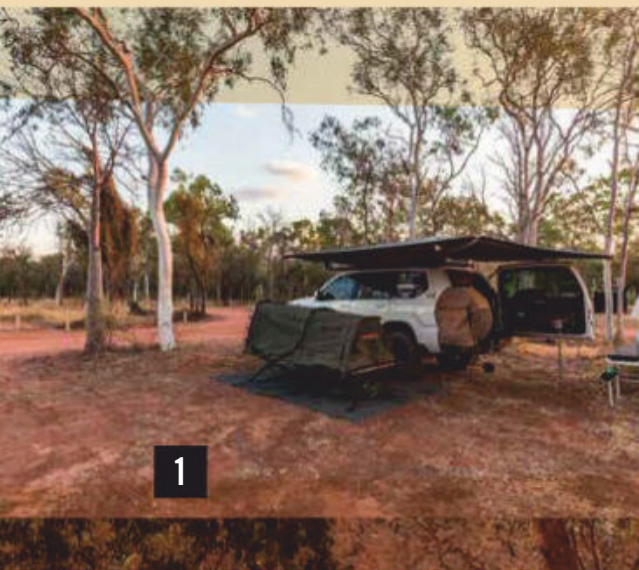
TRADESMAN SERIES



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to ease the ride over the corrugations. Unfortunately for us, Limestone Gorge and the campground were closed for maintenance works, so we missed out on some stunning scenery.

The campground is near the old homestead that is a reminder of the pastoral past of the Victoria River District. There are some information boards inside the homestead that tell the history of Bullita, and you can enjoy a cup of coffee or tea with the ranger in the shade of the rear veranda. The nearby Lancewood and Bloodwood stockyards are still maintained and used when rounding up feral cattle that stray into the National Park.

A great challenge is the 4WD-only Bullita Stock Route, a one-way loop track once used by packhorses and donkey teams bringing supplies to the isolated cattle stations. It was also a stock route to Wyndham used by Bullita and Humbert River Stations. The

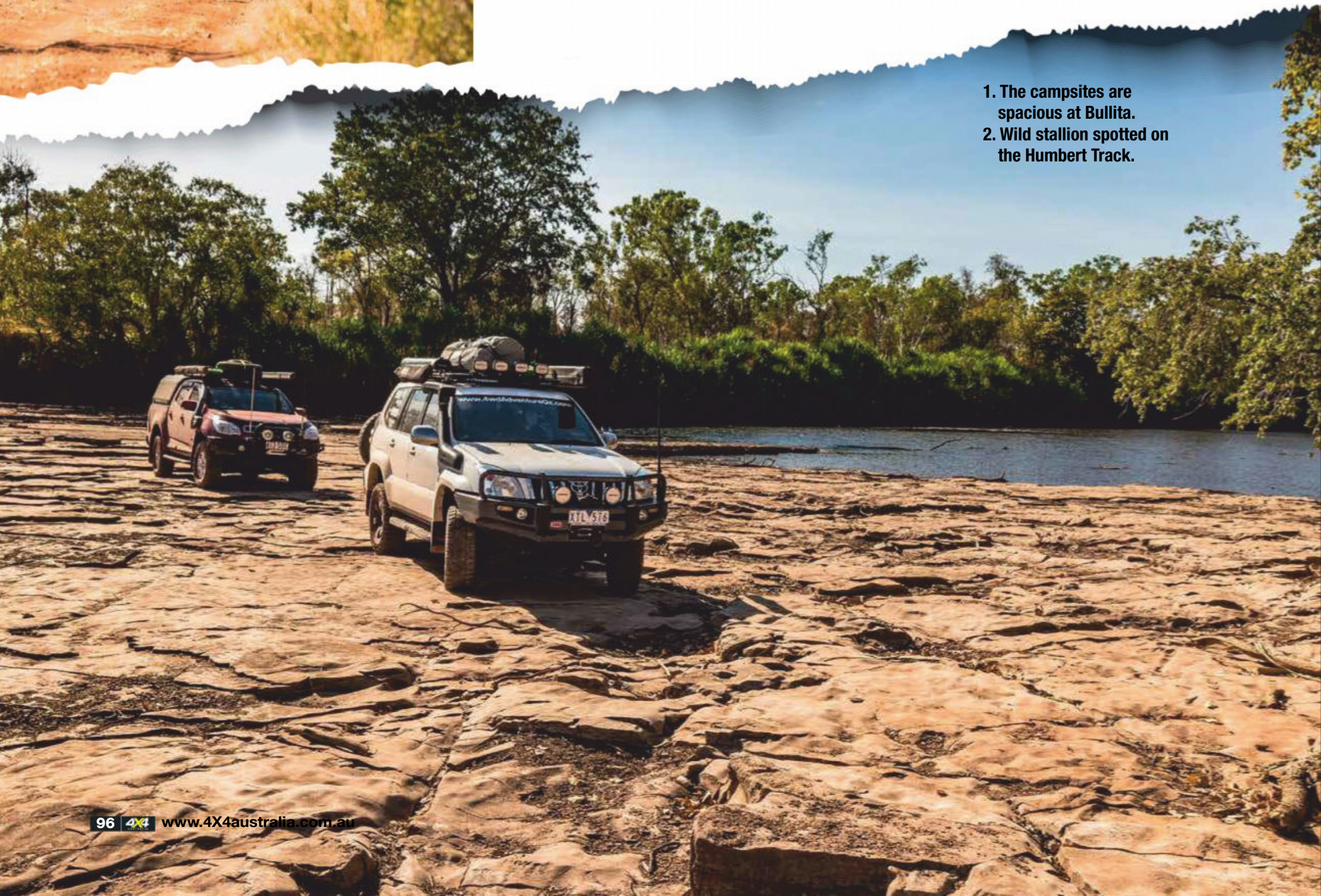
92.6km track crosses the East Baines River a couple of times, and it's usually dry during the cooler months. The first 10km of the track is rugged in places, with some nice wheel placement and low-range gearing needed at times. It then flattens and driving is easier as boabs, termite mounds, cane grass and bulldust dominates.


There is remote camping available at Spring Creek Yard, East Baines Crossing and Drovers Rest, with beautiful waterholes at the first and last camping spot. Beware the possibility of resident crocs, though, with swimming not recommended anywhere within the National Park. Allow at least six hours to complete the loop track; there is so much to see and trying to do it quickly may create mechanical issues.

Binns Track follows the Humbert Track that was used as a stock route between the Bullita Outstation and Humbert River Homestead. This is another beautiful drive

THE BEST PLACE TO SIT AND REFLECT ON THE EXPERIENCES OF THIS EPIC ADVENTURE IS AT THE HISTORIC DALY WATERS HOTEL

1. The campsites are spacious at Bullita.
2. Wild stallion spotted on the Humbert Track.






Free car wash as you cross the Victoria River. You beauty!

that is relatively easy with only the occasional rugged section. Once out of the Park, the roads open up as you pass through private property before reaching the Buchanan Highway.

Passing the expansive Victoria River Downs Station, you soon ford the Victoria River, with a nice, little free camp on the eastern bank. If you're rolling out a swag, publican Pauline won't charge you if you enjoy the pub's facilities. The grub is great and the showers the best you'll find.

It's only 180km until you reach the Stuart Highway and complete Binns Track. The best place to sit and reflect on the experiences, sites and scenery of this epic adventure is at the nearby historic Daly Waters Hotel, and that is exactly what we did. 

Travel Planner


WHERE: Binns Track from Gemtree to Daly Waters Hotel via Davenport Range and Gregory National Parks is more than 2300km, with the longest distance between fuel stops around 800km (Atitjere to Tennant Creek).

PERMITS: No permits required.

FUEL: Gemtree, Atitjere, Tennant Creek, Daly Waters, Mataranka, Katherine and Timber Creek provide unleaded and diesel fuel. Expect to pay top dollar for fuel at the remote places, too, with \$2/litre and above for diesel.

BEST TIME TO VISIT: From June to September as the weather is generally cooler and the wet-season waters should have receded.

MORE INFO: Paper maps, with the Hema Maps range providing excellent coverage. Some form of electronic navigation/mapping hardware/software such as the Hema HX-1 Navigator is also recommended.



Displacing dust in the majestic Gregory NP.



DESERT REBEL

WORDS AND PHOTOS CHRIS COLLARD

**THE MAHINDRA ROXOR
UTV TAKES ON THE
WILDS OF MEXICO.**







IT WAS WELL past dark, and our headlights were punching holes through the black void ahead. For the past 10 hours we'd been bouncing over rocky tracks, diving bumper-first into powdery silt beds, and twisting our way through precipitous arroyos. My duties as navigator were to keep an eye on the road book and GPS, and watch for hazards on the track. General grunt work you might say.

That afternoon we'd lost time when we stopped to pull our friend Larry's AMC Rambler out of a sand wash, and with a cut-off time of 10pm we were now in a race against the clock. I calculated our position and called out to Ned Bacon, my pilot, "We've got to average 20mph (32.2km/h) to make it." We weren't fast, but this 'race' was a tortoise-versus-hare pursuit.

This was Day 4 of the NORRA Mexican 1000, a 1250-mile (2000km) off-road contest in the vast expanses of Baja, Mexico. We were characters in Chapter Three of a two-month chronicle

of dirt tracks and red rocks. If we finished this stage on time, there was a possibility the "mighty" Roxor under our butts was going to put us on the podium.

One might ask what the heck Ned was thinking ...

racing an underpowered UTV with a top speed of 55mph (88.5km/h) tyre-to-tyre with 400hp (298.3kW) Ford Broncos? Well, Ned is the kind of guy that if you put a green flag in one place and a chequered flag in another, if the opportunity arises he'll don a helmet and jump on a pogo stick to get there first.

As with most crazy adventures, the opportunity arose over a coldy and a dare – could he finesse a rig with a 93-inch (2362mm) wheelbase and only 66hp (49.2kW) over some of the most demanding terrain south of the border? He upped the ante by adding to the pot the Easter Jeep Safari and Sonora Rally, another five-day endurance event in Mexico.

Before we delve into details, let's examine this unlikely competitor's backstory. A few months earlier, Mahindra delivered

“IN THE DUNES IT WAS LIKE WE BROUGHT A KNIFE TO A BAZOOKA FIGHT, BUT THE ROXOR IS A ROCK. LIKE A LITTLE TRACTOR, IT DID EVERYTHING WE ASKED”



1. Team Roxor rolls under the green flag in La Paz.
2. Teams must use a digital compass and old-school maps.
3. Departing Stage 1 of the Yokohama Sonora Rally.
4. Long days out on the tracks often lead to long nights.



1

7 ● ■ ROXOR5

555 3 ● ■



2

7 ● ■ ROXOR32

555 3 ● ■



3

7 ● ■ ROXOR12

555 3 ● ■



4

Crossing the Sierra de Juarez in Baja Norte, on Day 1 of the NORRA.

a bone-stock Roxor to Ned's shop and he went to work getting it race-ready. The term "race-ready", however, should not be confused with a complete strip down and rebuild. The boxy UTV came from an Auburn Hills, Michigan, assembly plant sporting Dana 44 axles, a rugged steel ladder-boxed chassis and a diesel engine. Mahindra was licensed by Willys Overland to manufacture the CJ-3A back in 1947, and has continued production for more than 70 years, but it is also one of the world's leading producers of tractors, aeroplanes and military vehicles.

Racing protocol mandated the installation of a full roll cage, PRP Roadster seats and harnesses, RaceQuip nets and a few other items. Because stuff happens in the desert, a Mahindra Accessories front bumper and winch plate were added along with an 8000lb Warn recovery winch, Spydura synthetic line, and two sets of MaxTrax. The drivetrain and suspension were left alone, save the addition of Fox 2.0 remote-reservoir shocks, Deaver add-a-leafs, bump

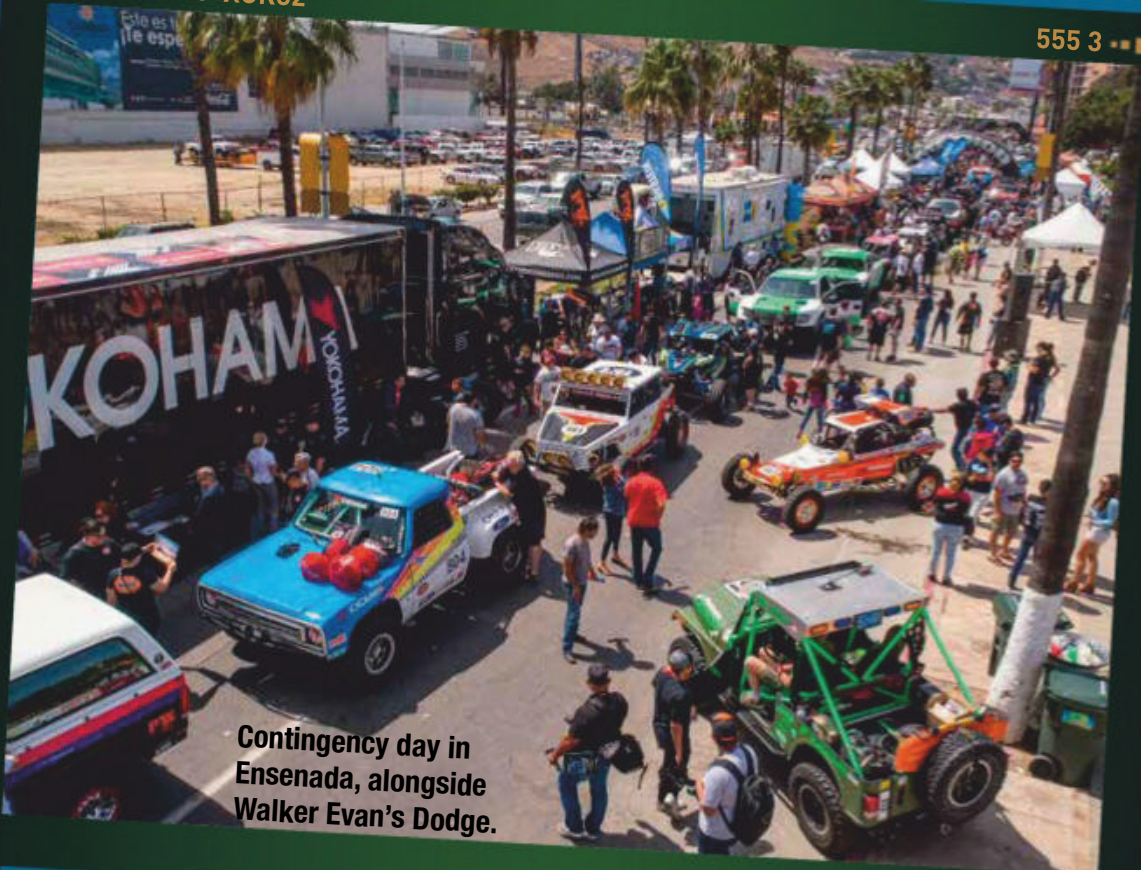
stops and a Spartan 'lunchbox' locking differential in the rear axle.

In an attempt to squeeze every ounce of juice from the 2.5-litre turbo-diesel, Ned had Vivid Racing re-flash the ECU which netted a solid 40 per cent increase in performance – to a whopping 90hp (67kW) and 200lb-ft (271Nm). Other goodies included Mahindra doors and windshield, a snorkel and custom 'wing' on the roof ... we'll call that a shade feature. After wrapping a set of Yokohama Geolander MTs around the stock wheels, it was off to Mexico and Chapter One, an 800-mile (1300km) off-road shakedown at the Sonora Rally.

SOUTH OF THE BORDER

I CHASED Ned and wife Kat (his normal navigator) through the endless sand sea of the Altar Desert, down long sandy beaches, up rutted arroyos, and uphill and down dale. Admittedly, sometimes I sat for hours in the shade of a lonely tree waiting to capture a photo – they were always dead last. I must preface this comment by mentioning that being slow isn't necessarily a bad thing; you make a lot of new friends when you're the last guy on the track.

Case in point: On several occasions, hotfooted drivers who had whizzed by ended up on the



Contingency day in Ensenada, alongside Walker Evan's Dodge.



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receiving end of Ned’s tow strap. The mighty Roxor rescued one UTV from certain death by pulling it out of the surf in a rising tide. Another (with two broken axles) was indebted after a long tow from a remote arroyo – the usual payment for said services is an endless supply of coldies at the nightly bivouac. Bacon said, “The highlight was pulling other competitors off the course when they were broken down.” The Roxor didn’t see the podium, but it did ferry its human companions to the finish line with nary an issue.

“In the dunes it was like we brought a knife to a bazooka fight, but that thing is a rock ... or Roxor. Like a little tractor, it did everything we asked. Rough as a cob, but just kept chugging along. It had 200 miles (321.8km) on the odometer at the starting line, and the only issue we had the entire race was a stretched fan belt.”

Chapter Two in the epoch found our lead character traversing the backcountry slickrock of Moab, Utah. Ned was one of the pioneers in the sport of competitive rock crawling, and sissy routes were not on the agenda. But the little Roxor, with its torquey diesel, nimble size and rear locker didn’t flinch, putting from one hardcore trail to the next, day after day. From Moab it was loaded on a trailer (the Roxor is not street-legal in the US) and found itself back in Mexico facing a daunting task.

THE WILDS OF BAJA

HUNDREDS of well-prepped four-wheel drives, dirtbikes and UTVs lined the streets of Ensenada for the start of the NORRA Mexican 1000 vintage rally. South by southeast as the crow flies, a chequered flag awaited in the 1730s mission town of San Jose del Cabo. While nearly all teams utilise a chase crew to carry extra tyres, fuel, spare parts and even backup drivers, Ned runs solo.

His steed must not only survive whatever conditions presented, but also transport him 1000 miles (1600km) back to a tow rig near the border. There was no way in hell they were going to win their class, but that didn’t matter. Life is about fun, and NORRA’s tag line is “The Happiest Race on Earth”.

Ned said, “Our goal is never to win any podium placement, just

MAHINDRA ROXOR UTV	
ENGINE	M2DiCR 2.5-litre turbo-diesel
OUTPUT	90hp (67kW), 200lb-ft (271Nm)
TRANSMISSION	5-speed manual
TRANSFER CASE	2-speed manual
AXLES	Dana 44, 3.73:1 ratio, Spartan rear locker
SUSPENSION	Stock, Deaver add-a-leafs, Fox 2.0 shocks
WHEELS/TYRES	265/75R16 Yokohama Geolander MT, stock aluminum wheels
BUMPERS	Modified stock Mahindra HD
RECOVERY	Warn 8000lb winch, Spydura synthetic rope
FUEL ECONOMY	20-22mpg (10.7-11.8L/100km)



Kat and Ned Bacon lining up for a special stage in the Sonora Rally.

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1. Ned's wife Kat is the trusty navigator of Team Roxor.
2. Receiving the chequered flag in San Jose del Cabo.

ROXOR RACER: A CLOSER LOOK



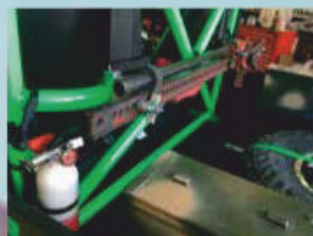
01 BUMPER CAR

Mahindra Accessories bumper was modified with a top hoop and fitted with Warn winch.



02 PROTECT & SERVE

Quality racing seats and five-point harnesses from PRP are darn comfortable.



03 JACKED UP

The venerable Hi-Lift jack is a must-have for backcountry travel, especially at Baja.



04 LOCKED DOWN

Mac's tie-downs and anchor channel secure the Yokohama Geolander MT spare.



05 SUSPENSION MODS

Deaver add-a-leafs and Fox 2.0 remote-res shocks, tweaked by Accu-Tune.

finish the race and have fun. So far that strategy has seen us on the podium three times.”

Three days later I slipped on my fire suit and helmet, and climbed in. I'm not proud of the fact I was Ned's third choice. Kat had other commitments and his backup navigator, Brian Lutz, was spending the day praying to the porcelain god – he and Ned had dinner with Montezuma the previous night. Ned had peeled himself away from the toilet in time to make his start time, but looked like an emaciated corpse.

By the time the sun disappeared in the west, we still had 40 more miles (64.4km) of Baja's rockiest, most miserable terrain to traverse. That day's course was only 260 miles in length, but I'd wager we only put 130 (209km) on the odometer, as we spent half the time in the air ... like a pogo stick. But the Roxor took it in its stride, chugging along at its own pace undeterred by delusions of podiums and trophies. Reaching the chequered flag with 12 minutes to spare, we turned the wheels toward La Paz. Larry pulling up in his Rambler a few minutes later. Underdogs rejoice! Feeling like a couple of wet noodles, it was one of those days we might look



back on through rose-tinted glasses and say, “We had a good time ... didn't we?”

Ned fired up the mill the next morning, Brian climbed back in, and they drove like banshees (as much as a Roxor can “banshee”) to San Jose del Cabo and the chequered flag.

When the dust settled after more than 1250 miles (2011km) of Baja's best, Team Roxor had achieved a proud third in Class on the podium. I overheard a patronising comment that, “yeah, but only three vehicles finished.” I had to laugh at the person's naivety and chimed in, “exactly, you've obviously never run this race.” The roads in India are largely undeveloped, and the mighty little Roxor takes its cues from its brethren tractors; it just doesn't stop.

Vehicles that finish a race like this have the fortitude to survive. As for the content of Ned's toolbox, it never saw the light of day. When trophies and awards were claimed, fireworks flamed out, and cold cervezas ceased to flow, Ned turned the wheels north toward Ensenada for a few days of backcountry camping on the way home. The Roxor can definitely take claim to championing the ‘Utility’ in UTV. **4x4**





BIG COUNTRY

WORDS & PHOTOS KEV SMITH

WE OFTEN HEAD STRAIGHT TO A DESTINATION AND MISS OUT ON PLENTY ALONG THE WAY, BUT THERE'S SIMPLY TOO MUCH TO MISS ON A TRIP UP THE KDR BETWEEN WINTON AND MINNAMOOKLA.





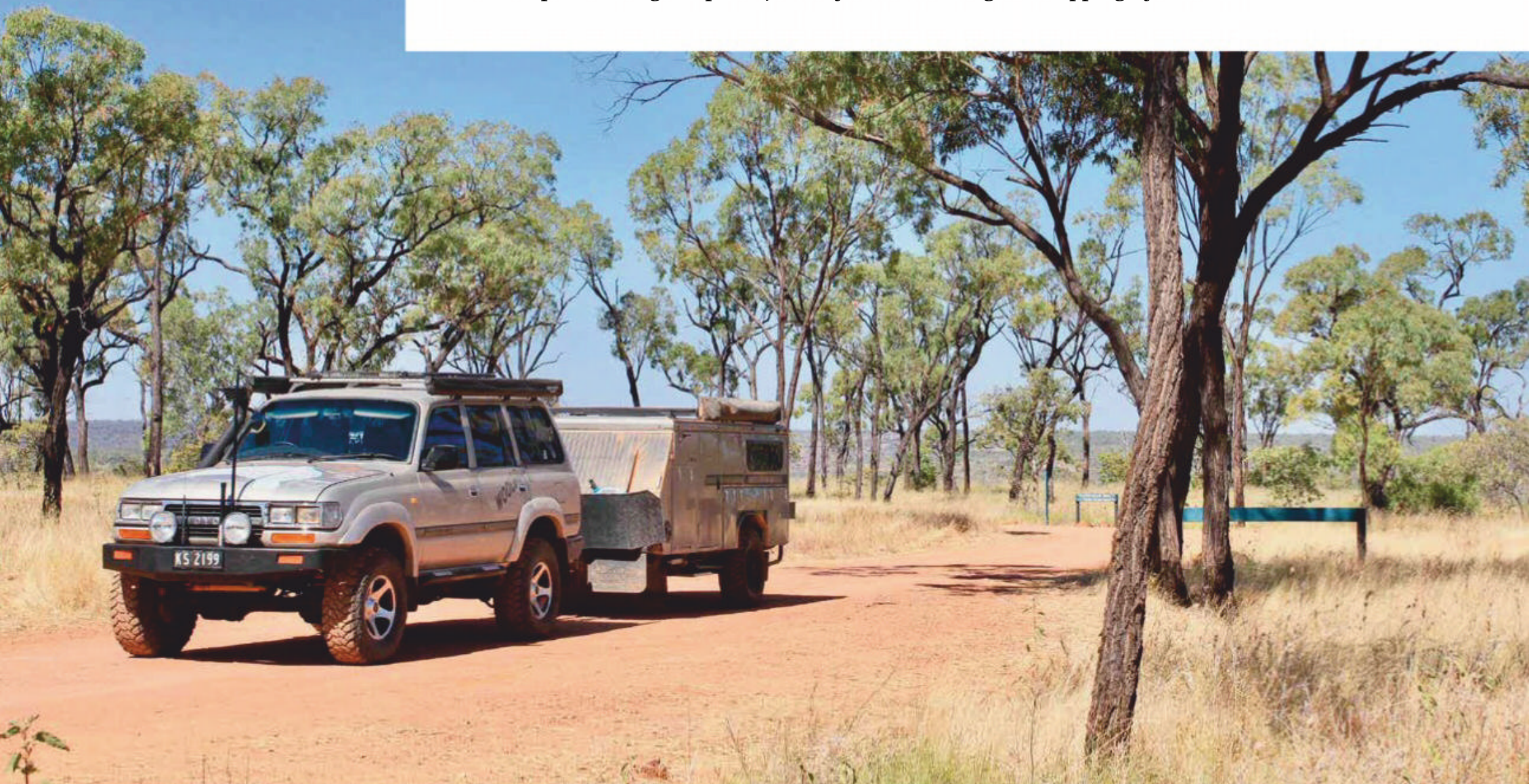
Access is easy, with ample camping options at Porcupine Gorge.

HEADING OUT from Winton it's a solid 220km run on the blacktop until the historical and colourful town of Hughenden. Wind the clock back to 1861 and it was Fred Walker who camped near the river heading north searching for the lost Burke and Wills party. Just opposite the Flinders River a huge coolabah tree was blazed by Walker in 1861, and the following year by explorer Landsborough, as they searched in vain.

Hughenden, or Mokana as it was named by the local Yirandhali people, was soon to become pastoral land, with huge sheep stations covering the area. The town has had a chequered past where pre-1900 barracks were set up for Aboriginal police, so they

could track down runaways in the harsh and often inhospitable outback. Over the next few years the town grew through land sales, shops were established, and a school, a courthouse and churches were built. On one occasion Americans had stored ammo underground just out of town, and during a 'controlled burn-off' the fire got out of hand causing explosions, which left huge craters, blew windows out of buildings and burnt shops down. Grand plans were passed in 1945 to build a two-storey courthouse, but after it was discovered that the foundations would not support the building, and there was a shortage of cement, it was eventually erected as a single-level building.

These days the town survives on agriculture and the tourist trade, the latter either passing through or stopping by to visit the dinosaur



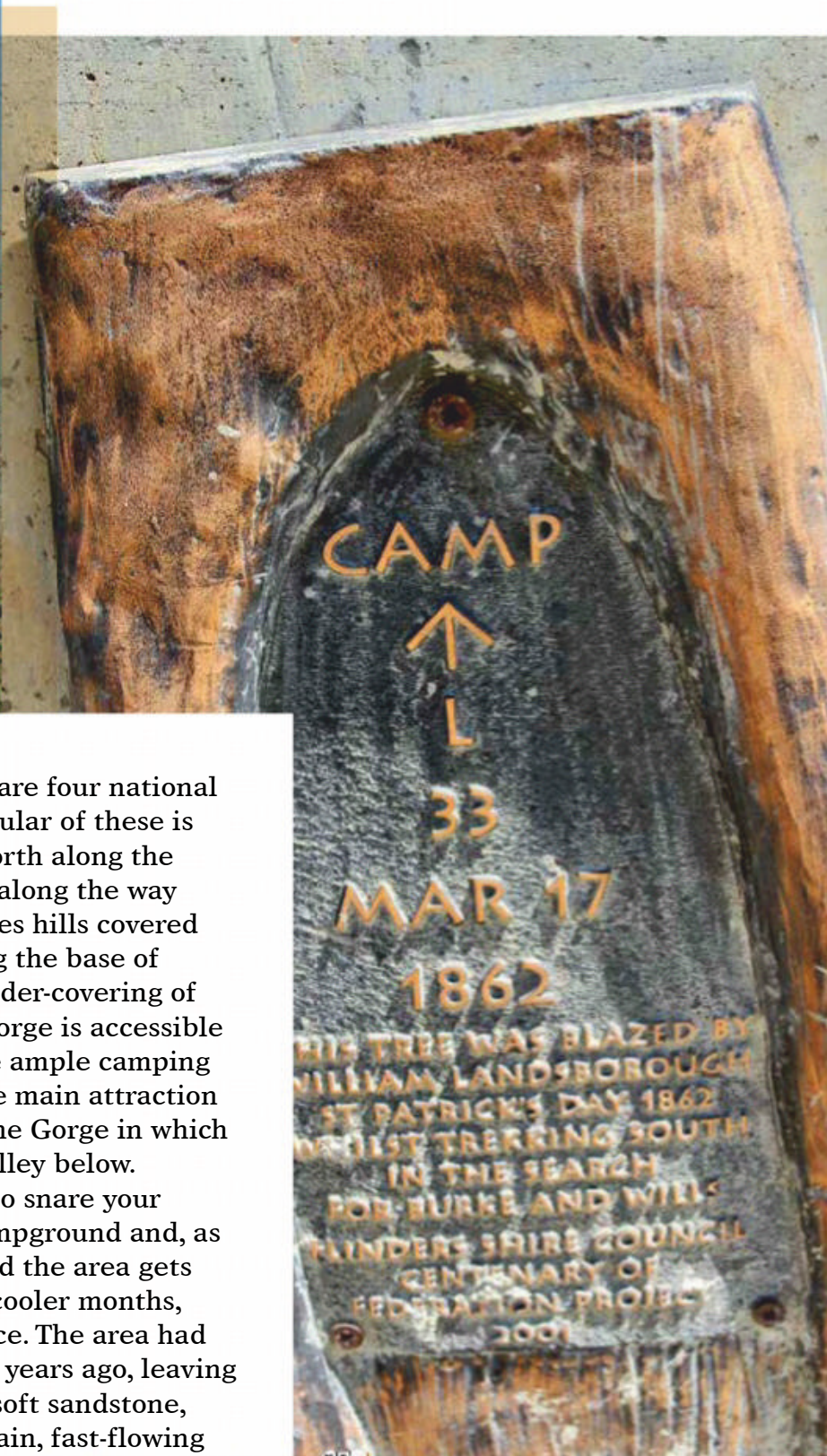


centre. Back in 1963 huge bones were discovered, which turned out to be an eight-metre Muttaborrasaurus that roamed the area some 100 million years ago. Hughenden is part of Queensland's dinosaur trail and the town has embraced this by setting up a fossil centre with all types of rocks, bones and interactive displays.

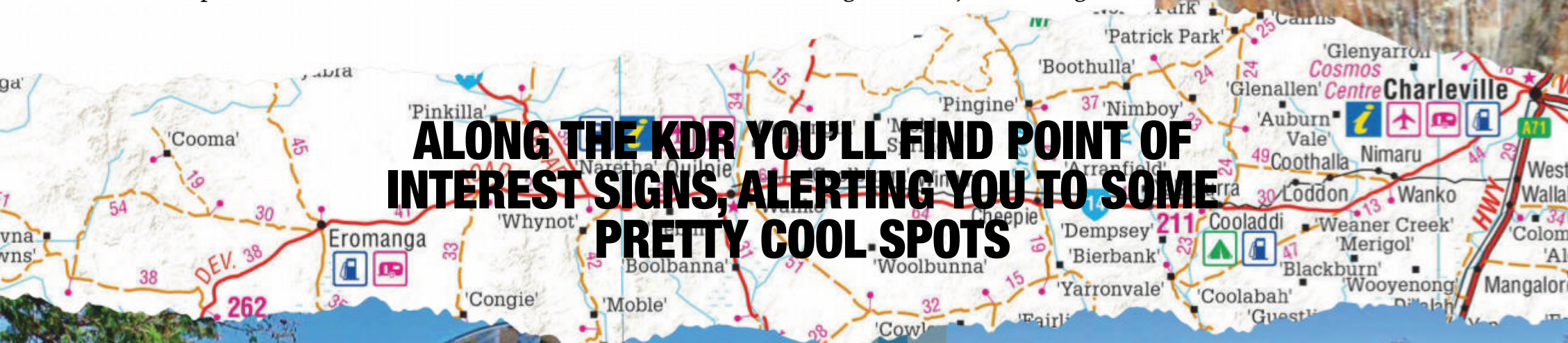
Along the Kennedy Developmental Road (KDR) you'll find Point Of Interest (POI) signs alerting you to some pretty cool spots. Just before the Porcupine NP turnoff, keep an eye out for Bottle Tree Hill; although, there are no bottle trees for miles either side of it. A track to the top offers unimpeded views across the plains and ranges in the distance. At the base of the hill is an information sign beside a pile of rocks that suggests a mailman was attacked at this site in 1886 by a group of hostile locals who speared him to death.

Surrounding Hughenden are four national parks, and the most spectacular of these is Porcupine Gorge an hour north along the KDR. It's 70km of blacktop along the way and a scenic drive that passes hills covered with sandalwood trees along the base of Mount Beckford, with an under-covering of Mitchell grass. Porcupine Gorge is accessible to any vehicle and there are ample camping areas and facilities, with the main attraction being the stunning Porcupine Gorge in which visitors can hike into the valley below.

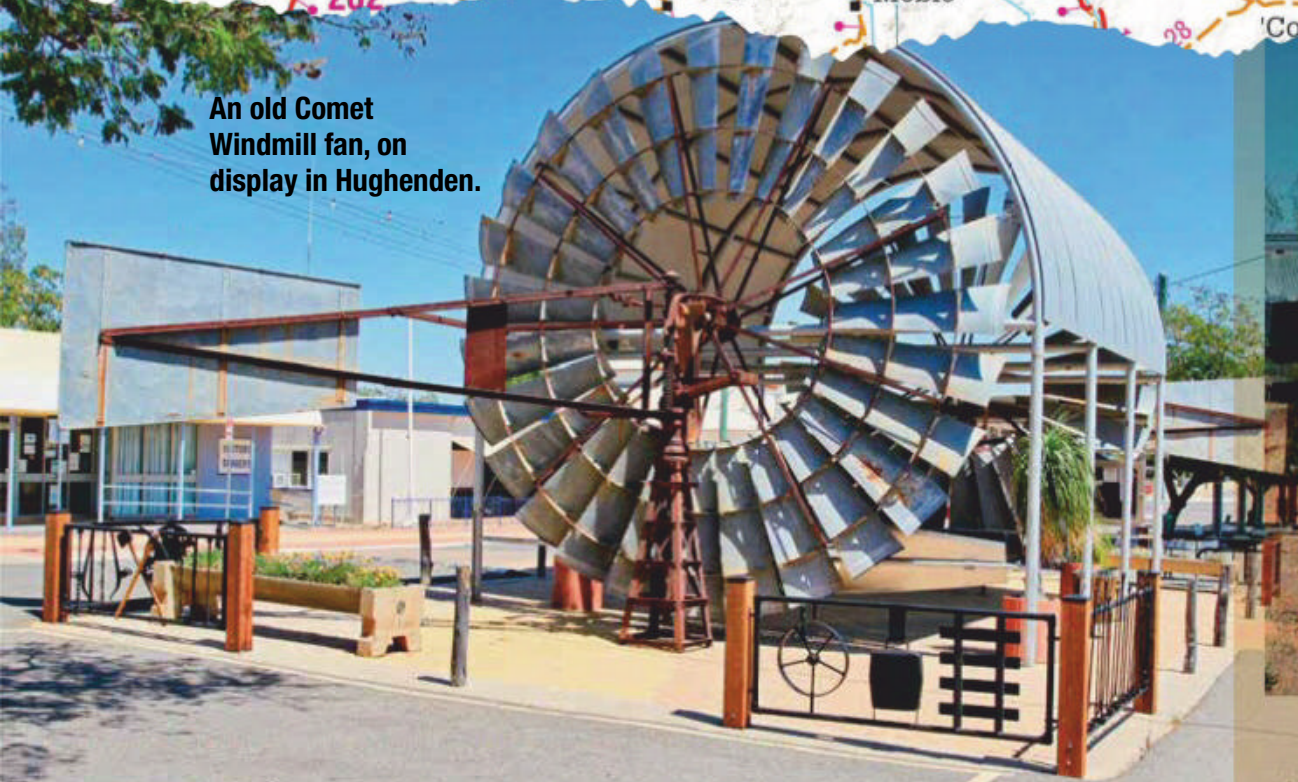
You need to book online to snare your spot at the one and only campground and, as there's limited reception and the area gets extremely busy during the cooler months, you should do this in advance. The area had volcanic activity millions of years ago, leaving hard basalt layers over the soft sandstone, and with weathering from rain, fast-flowing



ALONG THE KDR YOU'LL FIND POINT OF INTEREST SIGNS, ALERTING YOU TO SOME PRETTY COOL SPOTS



**An old Comet
Windmill fan, on
display in Hughenden.**





The KDR's mild tracks make taking a camper trailer a good idea.



floods and severe winds it has left what we see today: deep-cut gorges with a multitude of coloured layering rock. This place is a haven for birds (and birdwatchers) who flock here for the cool water deep in the gorge. It's also popular with hikers who are prepared to spend hours following the trails into the gorge.

While Porcupine Gorge is a great stopover, heading farther north along the KDR sees the tar give way to harsh unsealed outback roads not far from the park's entrance. Another information sign states that in 1888 a chap called Bill Crossley was bitten on the hand by a scorpion while trying to un-bog his wagon from the creek. It's said the nearest town doctor would not come out and help Bill until a deposit was made, but by the time his offsider had raised enough cash Bill had passed away by the creek. Today a rock cairn marks this

The view atop the famous rock wall in Porcupine Gorge NP, known as The Pyramid.





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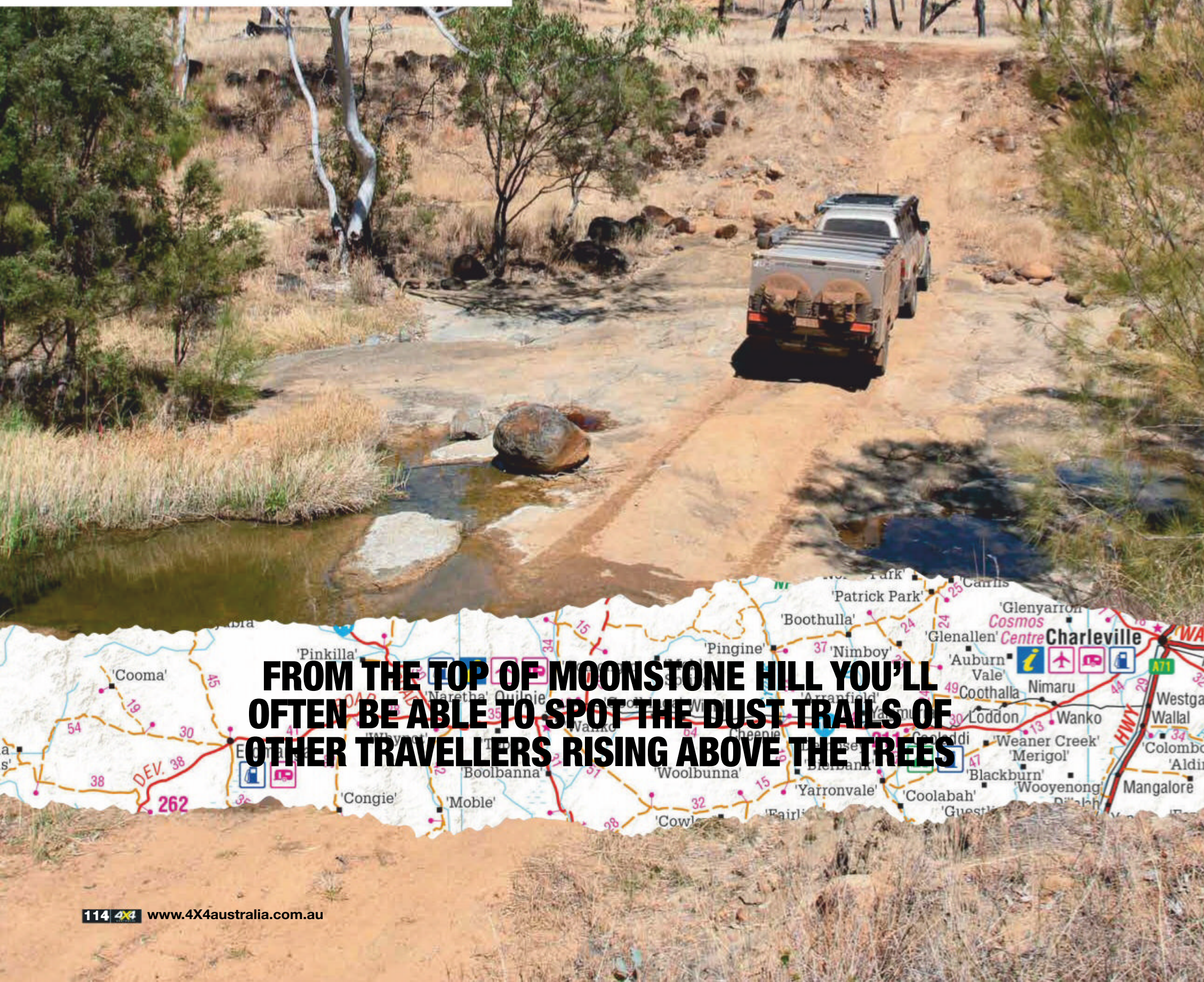
unfortunate occurrence.

Farther along you'll find a sign highlighting Whistling Bore, which was sunk to 500 feet with no water found, but on some days a noise can be heard rising from the capped-off bore. We think we heard the hum but, true or not, it's not a bad place to stretch the legs.

The KDR is narrow in some places, while some of the way it's as wide as a four-lane freeway. We encountered a few travellers going too fast in the opposite direction, and when they flew past at speed we had to look out for dust and rocks.

Some 100km along the route you'll find a couple of free camping sites near Moonstone Hill, and if you have a fossicking permit it's okay to look for a few gems. The gems found here are weird-looking clear pieces of rock not dissimilar to the broken shards of windscreen glass, and they're as small as a nail head up to a spoon size. These are only found on this side of the Montgomery Range. The 360-degree views from the top are stunning and

More demanding tracks can be found ... you just need to know where to look.



FROM THE TOP OF MOONSTONE HILL YOU'LL OFTEN BE ABLE TO SPOT THE DUST TRAILS OF OTHER TRAVELLERS RISING ABOVE THE TREES



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Despite no water being found, an audible noise can be heard rising from Whistling Bore.



often you'll be able to spot the dust trails of other travellers and cattle trucks rising above the trees.

Just up the road is Blackbraes National Park, where you can camp and explore. With a 21km road in and out, it's a good base to set-up for a few days to explore Emu Swamp Dam that, when full of water, is alive with birdlife. The dam is an ancient volcanic crater and the surrounding area is typical Gulf lowlands, with black soil plains covered with silver-leaved ironbark trees. The Gilbert Range heads north from here, providing runoff into the lake and surrounding areas.

After leaving this area the KDR follows Einasleigh Creek for many kilometres, and considering how much of the surrounding area was dry it was surprising to see water flowing in some of the creeks, and with it a few bustard birds prancing beside the road.

The local shire council was upgrading the road from Lyndhurst Station for around 20km and listening to them on the UHF we heard they were frantically trying to finish the job before the onset of the wet season. Along the way we found they had completed sealed sections up to 5km long. There are

some large properties out this way and with that there are some large trucks hauling cattle around, and despite most only hauling a couple of trailers they demand respect and need the whole road. The last 50km from Lyndhurst to The Lynd Roadhouse is in pretty good condition, but don't expect to be doing any breakneck speeds; generally our speedo was sitting around the 40 to 60km/h mark most of the way due to the rocky and sandy base and our lowered tyre pressures.

After two days on the KDR it was a pleasure to hit the tar near the Lynd Roadhouse (where basic supplies can be topped up) and the last 95km up to Minnamoolka is a dream drive. If you have time it's possible to explore the Undara lava tubes for a price, but that's at the end of the Kennedy Developmental Road.

While the 350km KDR is not a hard or technical drive, it's an interesting one for the seasoned traveller; however, bear in mind there's no phone reception along its length, even up on the ranges. At its end you are presented with several options; keep heading north towards the Atherton Tablelands or farther west towards Normanton along the Gulf Development Road.

WHILE THE 350KM KDR IS NOT A HARD OR TECHNICAL DRIVE, IT'S AN INTERESTING ONE FOR THE SEASONED TRAVELLER

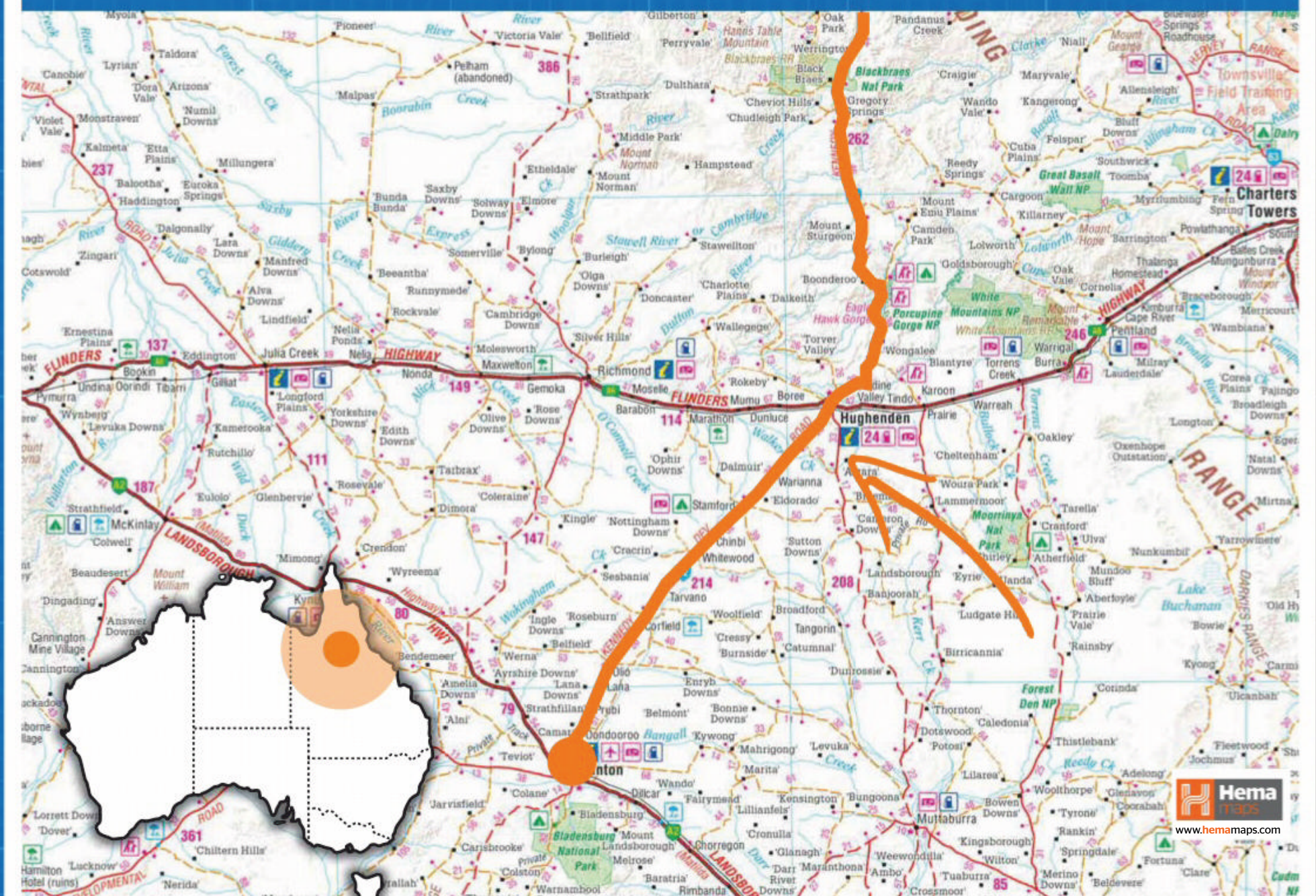
Long stretches of tarmac break up the bone-crunching off-road 'shortcuts' along the KDR.





There's no fighting
for camping spots
this far out of town.

KENNEDY DEVELOPMENTAL ROAD, QLD



WORDS **TOBY HAGON** PHOTOS **PHIL COOPER**

MUDDY COMPROMISE



IT CAN BE ARGUED THAT NOTHING BEATS A SET OF MUD-TERRAIN TYRES FOR DRIVING IN, WELL, MUD. BUT TO GET TO THE SLIPPERY STUFF YOU'LL NEED TO DRIVE OVER PLENTY OF BLACKTOP. LET'S SEE HOW MUDDIES FARE ON THE ROAD, IN THE WET AND THE DRY.

4X4
AUSTRALIA

20
20
TYRE
TEST

HERE AT 4X4 Australia we love a good chunky set of mud terrains as much as the next trucked-up wagon. They are, after all, the final piece of the rough-road puzzle for helping that modified rig get to where you want it to go.

But what compromises are you making along the way? What do you give up in grip, noise, cornering precision and comfort by opting for the chunkier black round things that promise to keep on going over just about any terrain? It was that thought that had us assembled at the new Pheasant Wood Circuit south of Sydney on a crisp spring morning.

After an appropriate caffeine injection, our colleagues at Tyreright were unpacking a truck and assembling piles of shiny new black tyres – each one ready to be punished through a selection of disciplines.

For this tyre test we've gone for mud terrains; the most serious of the off-road tyres for the most serious adventurer. Chunky tread and tough constructions make them a terrific choice for those heading off road. All tyres tested had a light truck (LT) construction with a tougher sidewall for additional off-road protection, albeit often at the expense of comfort and steering response.

As with all tyre designs, any benefits can be outweighed with drawbacks. It's those negatives we want to learn more about during this exhaustive test.





THE MUD FIELD

**BRIDGESTONE
DUELER M/T**



**SUNWIDE
HUNTSMAN**



**BFGOODRICH
MUD-TERRAIN
T/A KM3**



**KUMHO ROAD
VENTURE MT51**



**MAXXIS
RAZR MT**





Stock Everest was chosen for its common 17-inch wheels.

4X4 AUSTRALIA 2020 TYRE TEST

THE TESTING

TESTING was conducted at Pheasant Wood Circuit south of Sydney using a stock Ford Everest. We chose the base model for its 17-inch wheels, which provided access to a common 265/65R17 tyre size. All testing was conducted on tyres inflated to placard pressures by Paul Stokell, a former Australian Drivers' Champion and accomplished racer who knows how to push a car to the limit. The car's stability control was then switched off to allow the car to be tested on the limits of the tyres, rather than having electronics artificially create earlier limits.

Because differences are often measured in centimetres or fractions of a second it was down to technology to take care of the numbers. Data was collected on a VBox data logger, which

uses satellites to measure G-forces, speeds, track positions and angles.

Each tyre was put through wet and dry braking assessments, whereby the car is on maximum braking from 100km/h to a standstill. We then conducted three dry cornering tests and two wet cornering tests, evaluating how long it took the car to get through the curve.

For each test the best tyre receives a score out of 100, with the best getting the maximum score and others ranked according to how far they were from the winner. In some cases there were only a few points between best and worst.

The price of each tyre also factors into our rankings, though with a score out of 10 points to account for the big differences between cheapest and most expensive.

THE GRUNT WORK

WHILE the numbers are crunched on the track, it's in the pits where the grunt work happens. Our crew was from tyre retailer Tyreright, part of an independent network of more than 70 dealers covering all states and territories. Rather than being aligned to a particular brand, Tyreright offers a range of tyres at competitive prices. It also has a large online presence, with an ordering system that allows you to do all but the fitment itself. And with a price guarantee it provides reassurance you're getting a good deal.

They also do wonderfully quick tyre changes, with the time between our Everest rolling in on worn tyres and rolling back out on the track on fresh rubber measured in minutes. The lads then used the wheels off our spare car to fit and balance the next set of tyres while the action was going on out on the track.

Put simply, the test couldn't have happened without the Tyreright crew.



A VBox data logger meant we could ditch the stopwatch.



The Tyreright crew swapped tyres in a matter of minutes.



THE MOST DRIVING THAT MOST PEOPLE WILL DO IS ON BITUMEN, AND OUR TESTS HAVE SHOWN IT'S THE PLACE THAT MUD-TERRAINS ARE MOST COMPROMISED



Ah, bitumen ...
the arch enemy
of the muddie.



WHY WE DIDN'T TEST OFF ROAD

MUD-TERRAIN tyres are designed to go off road, so you may be thinking we've lost our marbles in not testing the very thing they're going to do plenty of. Basically, it comes down to the old argument of no two snowflakes are the same. Hear us out...

Off-roading is such a varied definition that encompasses wildly different surfaces, from sand and mud to rocks and grass. It can even include snow.

The logistics of testing one tyre thoroughly across every surface is enormous, especially in a country like Australia. We'd be covering thousands of kilometres just to adequately represent the varied terrains you can experience in our wide brown land.

Then there's the challenge of

replicating the testing over those surfaces to collate credible data.

Drive over one patch of dirt, for example, and it'll be compacted and shifted to the point where the next tyre to traverse it will be driving over subtly different ground. That holds true for mud, sand, snow and more.

So, while you can certainly learn plenty by covering big kilometres with different tyres, for this test it simply wasn't feasible.

Besides, most driving that most people will do is on bitumen. Even the most passionate adventurers will roll plenty of hotmix beneath their muddies at some point. And as our tests have shown, it's the place that mud-terrains are most compromised.



Without Tyrepower's
help, we'd probably
still be testing...

STANDARD FARE

OUR TWO Everests were fitted with Dunlop Grandtrek AT22 rubber. It's a popular choice also found on various Toyotas, among other brands.

They're an innocuous-looking tyre with a clear emphasis on on-road performance. You get that from the tread depth; there's just 9.5mm between the outside of the tyre and the inner grooves. On our mud terrain rivals that steps up to 14 to 15mm, providing more bite and more rubber to protect from punctures.

But in the on-road environment we used for this test the Dunlops performed very well, especially in

slowing the car in a shorter distance.

Emergency stopping distances in the dry were at least 1.5m better than each of our mud-terrains.

In the wet the contrast was more stark. The Dunlop tyres took 47.44m to stop, well ahead of the best of the muddies at 52.51m.

Cornering differences were not as pronounced in terms of outright grip, although Stokell noticed they added stability at speed and a predictability on the limit that some of the mud-terrains couldn't match.

"They're easy to bring back, too," noted Stokell when recovering from a slide.



4X4
AUSTRALIA

2020 TYRE TEST

KEEP THEM ROUND

THE TALLER tread blocks of mud-terrain tyres and softer rubber compound make them more susceptible to wearing, especially when driven hard on bitumen.

That's something we noticed during our track thrashes, as each of the muddies showed visual signs of wear – including feathering and wearing of edges. In comparison, the more road-biased tyres fitted standard to our Everest barely looked driven on, even after warm-up

attempts and multiple runs. It's for that reason Tyreright recommends rotating tyres every 5000km.

"Being a soft compound, mud-terrain tyres will wear out quicker than normal highway tyres," Tyreright told us.

If you buy your muddies through Tyreright they can be rotated and balanced for free every 5000km, at any one of the 70-plus stores located across the country.



Two Everests, so one can test while the other gets a tyre change.



BRIDGESTONE DUELER M/T

THERE’S a rugged simplicity about the design of the Japanese-made Bridgestone Dueler M/T. The design is uncomplicated and uncluttered, focusing attention on the chunky tread blocks. “Bridgestone Dueler” writing on the otherwise simple sidewall adds to the visual muscle and the aesthetic reinforcement that these tyres mean business.

Not so easy to digest is the price. At \$370 a corner the Bridgestones are the most expensive of the five MTs tested here. Clearly Bridgestone believes the long-running Dueler name is up to the task.

Things certainly got off to a good start, with the Bridgestones stopping shorter than their chunky rivals. At a fraction over 46m in the dry emergency stop they were at least 1.2m better than the rest.

That could be partially attributed

to slightly shorter tread depth, so less room for the tread blocks to flex. The Bridgestones had 14mm of tread depth versus 15mm for the BFGoodrich, Kumho and Maxxis tyres. However, that braking prowess didn’t translate to dry cornering, the Duelers hovering around the back of the field.

Similarly, the wet cornering was nothing special, simply on a par with others towards the back of the field. And the braking goodness didn’t translate to a wet road either, the Bridgestones smack in the middle of our five-tyre line-up.

While it wasn’t part of our scoring criteria, something that let the Bridgestones down was noise. There was a noticeable hum at speed, something that set off our noise meter. Stokell also noted that they howl in the wet, adding to the cacophony.

RESULTS: Bridgestone

DRY BRAKING (100-0KM/H)				
46.04m				
30	35	40	45	50m
WET BRAKING (100-0KM/H)				
53.86m				
40	45	50	55	60m
DRY CORNERING (3 CORNERS – COMBINED TIMES)				
16.14s				
0	5	10	15	20s
WET CORNERING (2 CORNERS – COMBINED TIMES)				
11.78s				
0	5	10	15	20s
PRICE				
\$370				
\$100	\$200	\$300	\$400	\$500



RESULTS: Sunwide

DRY BRAKING (100-0KM/H)

48.70m

30 35 40 45 50m

WET BRAKING (100-0KM/H)

58.45m

40 45 50 55 60m

DRY CORNERING (3 CORNERS – COMBINED TIMES)

16.12s

0 5 10 15 20s

WET CORNERING (2 CORNERS – COMBINED TIMES)

11.76s

0 5 10 15 20s

PRICE

\$210

\$100 \$200 \$300 \$400 \$500

SUNWIDE HUNTSMAN

IT'S A brand most wouldn't have heard of, now imported to Australia by our tyre team at Tyreright. To fill you in, Sunwide is produced by Chinese tyre manufacturer Qingdao, which also makes Aventus tyres for trucks.

As with so many things new, the appeal with the Sunwides is their price. At \$210 a tyre they undercut their rivals by plenty (between \$73 and \$160 per corner, which amounts to between \$292 and \$640 for a set of four). For some, that will be tempting, and it gave the Huntsmans some early points when crunching the numbers.

However, as our testing showed, there are concerns with grip. Slowing the car requires more road with the Huntsmans in place. On a dry road they took between 0.8m and 2.7m longer to stop than their rivals.

With the bitumen darkened by water the Sunwides struggled further,

to the point where they took between 2.7m and 5.9m longer to stop. To put it in perspective, the 58m it took to stop left them a full 11m farther up the road than the original Dunlops fitted to the Everest.

The Huntsmans clawed back some cred in dry cornering; although, once the road was wet things were, again, less impressive, with a decent overall score but inconsistent results through each corner.

Test driver Stokell clocked it straight away, saying the Sunwides lacked grip, something also noticeable in our cornering tests. "They let go of traction very early," he said, adding that "wet-weather grip was lower."

While we weren't using traction control, the tendency for the rear to slide into oversteer prompted Stokell to say the Sunwides would keep the ESC busy trying to control any slides.



BFGOODRICH MUD-TERRAIN T/A KM3



BOLT ON a set of BFGoodrichs and it's almost a statement that you're not prepared to compromise. They come with a premium price – \$350 per hoop – and an even bigger reputation in the bush.

Still owned by Michelin and made in the United States of America, the BFGs have plenty to live up to, especially in M/T KM3 guise.

A muscular almost organically shaped tread pattern looks the business, as does the white lettering on the side.

From the outset, though, the BFGs asserted themselves in the middle of the field for on-road grip rather than anything extraordinary.

Braking performance in both wet and dry was reasonable without excelling, Stokell noting that braking

was their best asset.

Similarly, the wet cornering was acceptable and much closer to the pointy end, finishing second only to the Maxxis.

But it was through our trio of dry corners where the BFGs slipped slightly. They were still within the hunt but hovered towards the back of the field in all three corners – just – in what is a critical test.

Our punishment also took its toll on every second tread block, the outer, prouder chunk succumbing to scalloping that suggests you'd want to be on top of rotating them regularly if you're keen through the corners.

Of course, BFG would argue its MT tyres do their best work off the beaten track, something we don't doubt. But it wasn't part of this test.

RESULTS: BFGoodrich

DRY BRAKING (100-0KM/H)

47.92m

30 35 40 45 50m

WET BRAKING (100-0KM/H)

53.78m

40 45 50 55 60m

DRY CORNERING (3 CORNERS – COMBINED TIMES)

16.18s

0 5 10 15 20s

WET CORNERING (2 CORNERS – COMBINED TIMES)

11.54s

0 5 10 15 20s

PRICE

\$350

\$100 \$200 \$300 \$400 \$500



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DON'T GET BOXED IN WITH OUTDATED DESIGNS



RESULTS: Kumho

DRY BRAKING (100-0KM/H)				
47.29m				
30	35	40	45	50m
WET BRAKING (100-0KM/H)				
55.79m				
40	45	50	55	60m
DRY CORNERING (3 CORNERS – COMBINED TIMES)				
15.80s				
0	5	10	15	20s
WET CORNERING (2 CORNERS – COMBINED TIMES)				
11.84s				
0	5	10	15	20s
PRICE				
\$283				
\$100	\$200	\$300	\$400	\$500

KUMHO ROAD VENTURE MT51

LOOKS aren’t everything, which is lucky, because the muddies sold by Korean tyre company Kumho don’t have that same unforced masculinity of some rivals. Known as the Road Venture MT51 and manufactured in Vietnam, they’re a value-focused tyre that retails at \$283 per corner.

Tread blocks climb subtly down the sidewall, but as with the face of the tyre there’s nothing too aggressive; depending on your taste or purchase criteria, that could be good or bad.

The design does have its benefits, most notably with noise. Our noise meter and Stokell’s ears had the MT51s as the quietest of tyres. There was nothing like the whirring or humming that inflicts so many muddies, the restrained tread instead proving gentler on the bitumen.

The Kumhos also performed well from a grip perspective, leading the MT field in one of the wet and one of the dry corners. That they were close to the money in the rest helped maintain their above-average level.

Stokell was also impressed with the progression on the limit, especially with water on the road.

“They’re very predictable in the wet ... they let go very controllably.”

It was only in wet braking that the Kumhos were less than impressive, taking a couple of metres longer to stop than most.

One big question mark remained, though, and that was how they would perform off road. That less aggressive tread seems to help on road, but it may not fare as well once rocks and mud enter the equation.



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MAXXIS RAZR MT



FRESH from a surprise win in our all-terrain tyre test last year, Taiwanese manufacturer Maxxis is arguably better known for its mountain bike tyres than larger ones fitted to cars.

Clearly the brand knows what it's doing, and the Razr MT is the tyre on offer at this end of the market.

From the outset Stokell knew he was driving on tyres that were working better at ground level. The Razr MTs were nowhere near the tyres originally fitted to the Everest for outright grip and poise – road-focused tyres clearly work better on bitumen – but they outclassed their rivals in most disciplines.

It started with wet braking, where the Maxxis stopped at least 1.3m shorter than all rivals. Wet cornering was equally impressive, the Maxxis adding an extra degree of confidence

to allow Stokell to push on that fraction harder, in turn scrabbling through the corner better.

If there was one criticism it was in the way it let go approaching the limit. "It certainly let go faster in the wet," he said.

Even in dry cornering the Razrs were at – or very close to – the pointy end in each of our corners. Total the trio and it was a slim victory around dry corners. Only in dry braking did the Maxxis rubber trail its rivals, outclassed by Bridgestone and Kumho.

That the price slotted in the middle of our field, at \$305 each, made them all the more impressive.

The Maxxis tyres were also among the best for protecting its outer edges after a solid thrashing, which added some non-scoring goodness to its repertoire.

RESULTS: Maxxis

DRY BRAKING (100-0KM/H)				
47.93m				
30	35	40	45	50m
WET BRAKING (100-0KM/H)				
52.51m				
40	45	50	55	60m
DRY CORNERING (3 CORNERS – COMBINED TIMES)				
15.77s				
0	5	10	15	20s
WET CORNERING (2 CORNERS – COMBINED TIMES)				
11.28s				
0	5	10	15	20s
PRICE				
\$305				
\$100	\$200	\$300	\$400	\$500



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2020 TYRE TEST

RAZR SHARP

WHICHEVER mud-terrain you choose you'll be making on-road compromises, and in some instances they're big compromises that stretch stopping distances or lower the limits of adhesion through corners. The trade-off, of course, is more comfortable and capable off-road touring with less chance of a puncture.

Assuming you've made that decision, it's the Maxxis Razr that performed best in our tests – keeping in mind that we didn't test the off-road side of the equation. Instead, we focused on which tyres made the least compromises on-road. The decent grip in wet and dry made the Maxxis a solid performer in all disciplines, either leading or doing very well in each category. It was a clear winner, with the sharp pricing helping extend its lead over its quartet of rivals.

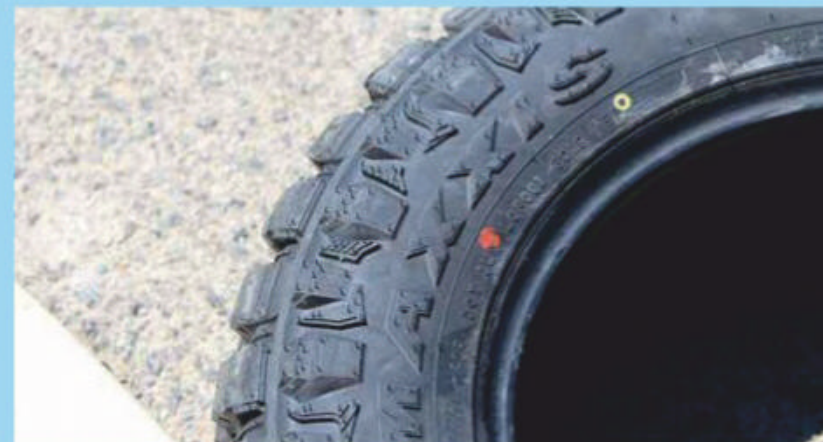
Second place went to the Bridgestone Dueler, the most expensive tyre we tested. It was its performance in dry braking that inched it ahead of a tight middle pack. Less impressive was

cornering performance, something that only just kept it ahead of hard-charging competitors.

Rounding out the podium was the Kumho Road Venture MT51. While it slipped occasionally in the wet cornering, it regained points through dry bends and dry braking. That the Kumho was respectably quiet was a bonus.

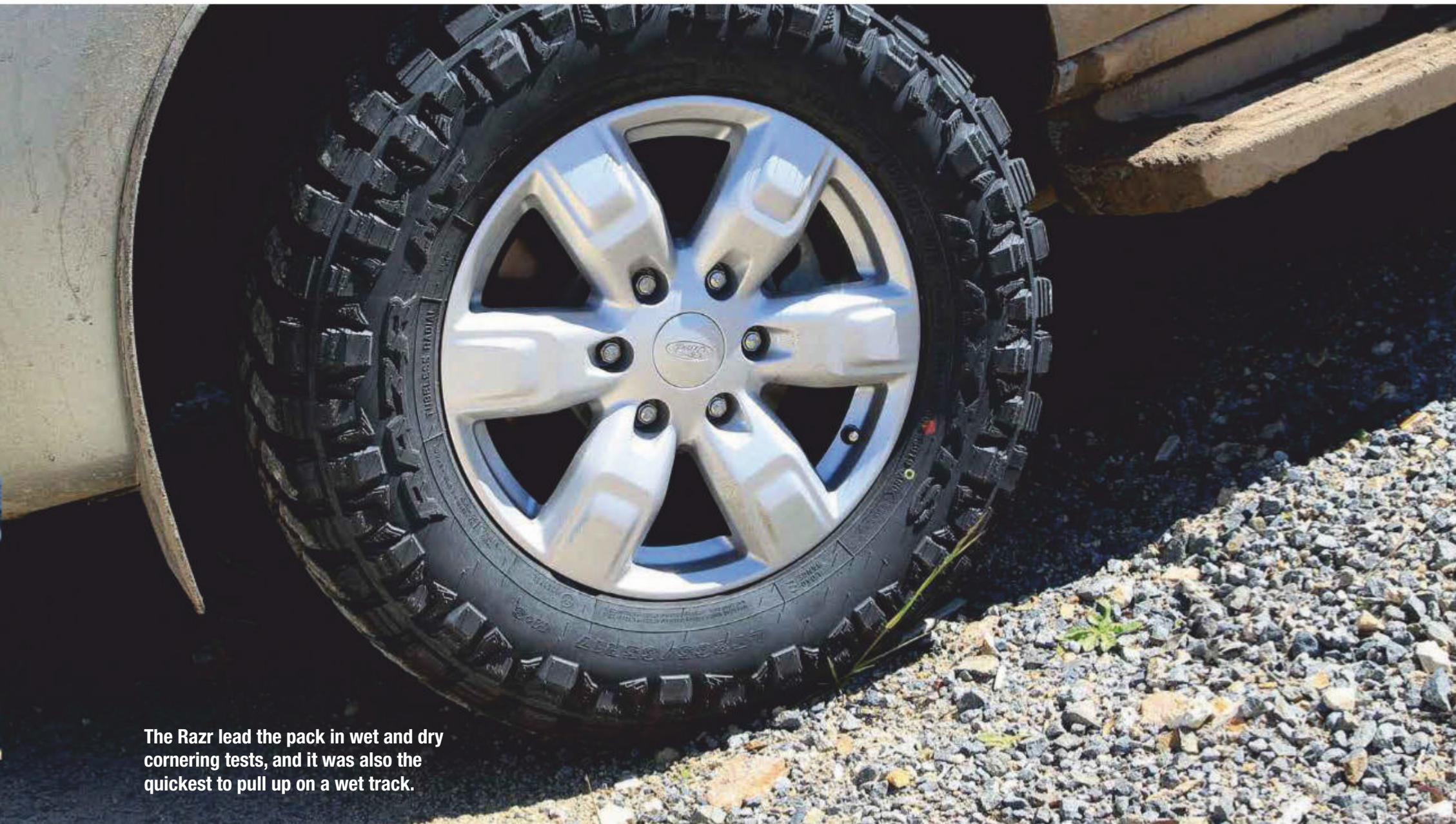
Next was the BFGoodrich KM3s. While it didn't lead any of our testing disciplines it put up a solid performance in all, albeit at a premium price. If reputation counts for anything, it should back it up with solid off-road performance.

Bringing up the tail in this test is the Sunwide Huntsman. While cornering efforts were respectable, the Huntsman was off the pace with braking – a critical aspect of any off-roader, especially when heavily laden. It was especially noticeable in the wet, where the tyre skated along the wet road metres beyond where others had pulled up. **4x4**



The Maxxis' solid construction meant its outer edges remained in good nick following the abusive tests.





The Razr lead the pack in wet and dry cornering tests, and it was also the quickest to pull up on a wet track.



RESULTS: DATA

Dry braking (100-0km/h)	
1	Bridgestone 46.04m (100 pts)
2	Kumho 47.29m (97.3 pts)
3	BFGoodrich 47.92m (95.9 pts)
4	Maxxis 47.93m (95.9 pts)
5	Sunwide 48.70m (94.2 pts)

Wet braking (100-0km/h)	
1	Maxxis 52.51m (100 pts)
2	BFGoodrich 53.78m (97.6 pts)
3	Bridgestone 53.86m (97.4 pts)
4	Kumho 55.79m (93.8 pts)
5	Sunwide 58.45m (88.7 pts)

Wet cornering (2 corners – combined times)	
1	Maxxis 11.28s (100 pts)
2	BFGoodrich 11.54s (97.7 pts)
3	Sunwide 11.76s (95.7 pts)
4	Bridgestone 11.78s (95.6 pts)
5	Kumho 11.84s (95.0 pts)

Price	
1	Sunwide \$210 (10 pts)
2	Kumho \$283 (6.5 pts)
3	Maxxis \$305 (5.5 pts)
4	BFGoodrich \$350 (3.3 pts)
5	Bridgestone \$370 (2.4 pts)

Dry cornering (3 corners – combined times)	
1	Maxxis 15.77s (100 pts)
2	Kumho 15.80s (99.8 pts)
3	Sunwide 16.12s (97.8 pts)
4	Bridgestone 16.14s (97.7 pts)
5	BFGoodrich 16.18s (97.4 pts)

**Point scores are rounded to the nearest 10th for brevity. But for the final points total we included all decimal places; in some instances the totals of the rounded individual scores may differ slightly from the actual total score. Prices are RRP and supplied by Tyreright.*

THE FINAL RESULTS

1	Maxxis	401.4 points
2	Bridgestone	393.0 points
3	Kumho	392.4 points
4	BFGoodrich	391.9 points
5	Sunwide	386.4 points

MAXXIS

4x4

A U S T R A L I A

WINNER 2020 TYRE TEST!

THE MAXXIS RAZR MT772 HAS TAKEN
**THE TOP SPOT IN THE 2020 4x4
AUSTRALIA TYRE TEST**

**THAT'S TWO WINS IN A ROW FOR MAXXIS
– WE'RE ON A ROLL!**

4x4
AUSTRALIA

**2020 TYRE
TEST**



WWW.MAXXISTYRES.COM.AU

GEAR

PRODUCT TESTS & NEW STUFF

BENDIX ULTIMATE 4WD BRAKE UPGRADE KIT

Packaged in a heavy-duty touring case, the kit includes advanced brake pads and rotors, braided lines and all the ancillary items required for a smooth changeover from OEM brakes. The Bendix high-performance ceramic material pads are claimed to offer increased stopping power in extreme conditions, while the new rotors incorporate innovative tech such as high carbon metallurgy for increased braking performance, as well as special diamond tip slots and a bi-directional pillar design to efficiently expel gases, water, dust and grit. Bendix says the kit also provides better feel at the pedal and improved resistance to brake fade. Suits a range of modern 4x4s. RRP: \$1199

Website: www.bendix.com.au



NARVA EXPLORA 175 LED DRIVING LIGHTS

Narva's new Explora 175 LED Driving Lights feature 'Advanced Optic Drive Technology' claimed to produce brighter light (3800 lumens and 1 lux of light at 535m) up to 20 per cent compared to more traditional 175mm free-form LED driving lights. The lights feature XHP50.2 Cree LEDs controlled using Optic Drive technology to ensure light is focused where it's needed. An LED position light pipe is included in the modern and compact design, and each light weighs just 600g. The fully sealed polycarbonate housing includes a Nitto breather vent and hard-coated lens, while a pressure, diecast aluminium heatsink and Active Thermal Management System (ATMS) keep the LED chipset cool. Installation is easy thanks to an included three-pin DT connector, and the mounting brackets and hardware are manufactured from stainless steel. An optional wiring harness and polycarbonate lens protectors are also available.

RRP: \$299 (pair)

Website: www.narva.com.au



REDARC 52MM GAUGES

Tailored to meet the requirements of 4x4 and camping enthusiasts, Redarc 52mm gauges are ideal for monitoring vehicle vitals including battery voltage, current draw, exhaust gas temperature (EGT), manifold boost and vacuum pressure, oil pressure, and a range of temperature applications including ambient, cabin, oil, water, coolant and fridge cabinet. The gauges use unique LCD/LED technology and combine needle point and digital display on the one dial. Each gauge can be customised with 13 different backlit colours, and program multiple alert levels. These Aussie-made gauges combine dual or triple functions in the one unit, and are simple to install and operate. Redarc also offers a range of compatible optional sensors, mounting solutions and accessories.

RRP: \$184 to \$484

Website: www.redarc.com.au

ARB COMPACT SLEEPING BAG

The new Compact Sleeping Bag from ARB is lightweight yet warm and has been designed for temperatures ranging from -5°C to +5°C. The bag weighs just 2.85kg and features an Alu-tech breathable internal liner that is claimed to aid heat retention and breathability. Other features include a removable hood with an inbuilt pillow holder, a brushed Microfiber Plus liner for added comfort and temperature control, drag barriers along all zips and a water-resistant roll-top carry bag. The sleeping bag has also been designed so that it can be connected to a second ARB sleeping bag. It's covered by a two-year warranty.

RRP: \$139 (Australian East Coast Metro)

Website: www.arb.com.au



MSA 4X4 FRIDGE BARRIER

The new MSA 4X4 Fridge Barrier allows the safe and secure storage of accessories and luggage around the fridge, while retaining access to fridge contents without having to unpack gear. It features a black powder-coated steel frame for safety, strength and durability, and has practical side pockets to store small items such as stubbie coolers, cups and bottle openers. The Fridge Barrier has been designed to fit perfectly around the MSA 4X4 Drop Slide and Fridge Slide range, and the smallest possible footprint to maximise vehicle cargo space. The barrier is easy to install and is covered by a lifetime guarantee.

RRP: From \$399 (plus delivery)

Website: www.msa4x4.com.au

EFS 4X4 ACCESSORIES DIFF DROP KITS

EFS 4X4 Accessories has developed a range of Toyota Diff Drop Kits designed to assist in the realignment of vehicle CV joints when a suspension lift has been introduced. The Diff Drop Kits include all required spacers, flat/spring washers, bolts and rings. The spacers are made from tough T6061 high-grade aluminium alloy and all nuts and bolts are made from high-quality nickel-plated 10.9 or 8.8 grade bolts. The range includes Diff Drop Kits to suit Prado 120 and 150 models, FJ Cruiser, MY2005+ Hilux and LC200. In addition, EFS has developed a Centre Bearing Spacer to suit MY2015+ Mitsubishi MN-MQ Tritons that's designed to reduce the vibration often associated with a suspension lift on this model.

RRP: From \$124.80

Website: www.efs4wd.com.au

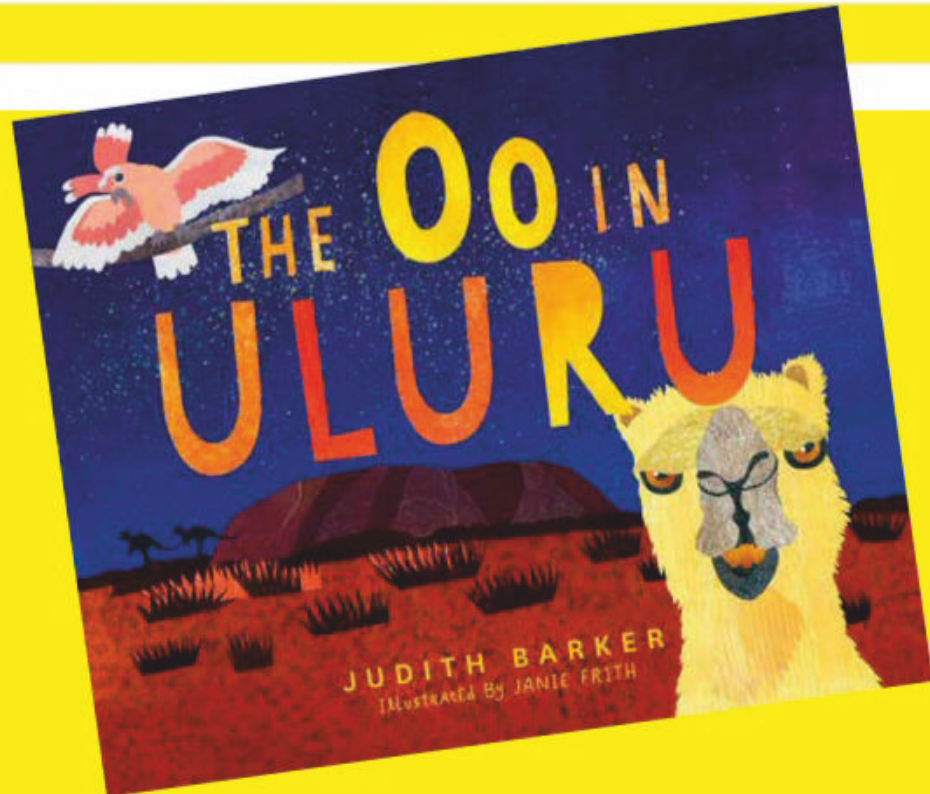


DIRECTION PLUS PRELINE-PLUS

The Direction-Plus PreLine-Plus is described as an innovative pre-filter that has been designed to protect your diesel fuel system from corrosion and abrasion. The PreLine-Plus kit includes an intuitive multistage water alert and is claimed to provide 100 per cent water-separation efficiency and a long service life. The manufacturer also claims the PreLine-Plus meets the specifications set by leading manufacturers of diesel fuel injection systems.

RRP: From \$550

Website: www.direction-plus.com



THE OO IN ULURU

This fun Australian children's book has been shortlisted for the 2019 Speech Pathology Australia book awards. *The OO In Uluru* is a fun Australian-themed phoneme story that teaches young readers about the long vowel 'oo' and where they can find it in different words. The story, written by Judith Barker, is set in Uluru-Kata Tjuta NP and in it a young girl explores the spectacular wildlife and nature of the Anangu. This book, which features colourful illustrations by Janie Frith, is a great read for all children, especially those who have visited or are planning to visit Uluru.

RRP: \$16.99

Website: www.booktopia.com.au

SHERPA 4X4 240V AC MOTOR RAMP WINCH

As well as a great range of 12/24V winches for vehicle applications, Sherpa 4x4 now offers a 240V AC winch designed to haul boats or other equipment up steep ramps and into you garage. The Motor Ramp Winch is available in 7000lb (high speed) and 12,000lb capacities, and both variants feature push-button controls and a simple plug-and-play design. The winches come standard with a single-phase motor or can be supplied with an optional three-phase motor. The winches are suitable for outdoor installations thanks to an IP55 rating, and are fitted with double lip seals and O-rings to keep water out. The 240V winches are covered by a two-year warranty.

RRP: \$1999

Website: www.sherpa4x4.com.au/products/ac-electric-winches





RHINO-RACK PIONEER CORNER BRACKET AND TIE-DOWN KITS

Designed to make securing gear easy on Pioneer Trays, Tradies and Platforms, the new Rhino-Rack Corner Bracket and Tie-Down kits are made from durable aluminium alloy with a powder-coat finish. The corner brackets are designed to wedge against the side of your gear, allowing you to easily strap and secure items using the integrated eye bolts as anchor points; while the Tie-Down kit includes four tie-down points with a low-profile design making them an ideal load-securing system when height is an issue.

RRP: \$129.95 (Corner Bracket Kit); \$55 (Tie Down Kit)

Website: www.rhinorack.com.au



THUNDER HEAVY-DUTY BATTERY BOX

The Thunder portable battery box has been designed to accommodate AGM deep-cycle vehicle batteries up to 120amp/h in size. Once the battery has been fitted, it can be charged via the vehicle's DC-DC charger or via a solar panel, and can then be used to power 12V accessories. The Thunder battery box incorporates 2 x 50amp Anderson-style connectors, 2 x 15amp 12V DC sockets, dual 5V 2.4amp USB ports and a 12V DC voltmeter.

RRP: \$218

Website: www.thunderauto.com.au

TRIGGER 3001 SIX SHOOTER ACCESSORY CONTROL SYSTEM

This system allows the installation of electrical accessories without the need to run wires through the vehicle's firewall. The unit can be mounted in the engine bay or exposed to the elements, and the wireless remote has click-feel switches for mounting in the cabin, while the RF remote control allows accessories to be operated from outside the vehicle. It is programmable for security. A Bluetooth app allows users to control functions from an Apple/Android smartphone, such as on/off and dimming functions, as well as flashing when used with LED or conventional lighting. The unit features 2 x 30amp, 2 x 10amp and 2 x 5amp circuits, comes with six wiring harnesses with waterproof connectors, accepts 12V and 24V input, and has a built-in Bluetooth battery monitor. Warranty is three years.

RRP: \$795 (introductory offer \$595)

Website: <https://shop.4x4megastore.com.au>





AUSTRALIAN MADE PRODUCTS

DBE180-SX

ELECTRONIC DUAL BATTERY MANAGEMENT



DBE 180-SX
DUAL BATTERY MANAGEMENT SYSTEM
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• Digital Charging
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ASK US HOW

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THE AUSTRALIAN AUTOMOTIVE 4X4 MARKET HAS A RICH AND PROUD HERITAGE. FOR YEARS LOCAL DESIGN, INGENUITY AND MANUFACTURING HAS CREATED MANY FANTASTIC FOUR WHEEL DRIVE RELATED PRODUCTS.

AT **4X4 AUSTRALIA** WE ARE PROUD TO SHOWCASE AND SUPPORT TRULY AUSTRALIAN ENGINEERED AND MANUFACTURED PRODUCTS - HERE ARE A FEW AUSSIE MANUFACTURERS KEEPING THE DREAM ALIVE, HELPING TO KEEP THE LOCAL MANUFACTURING INDUSTRY THRIVING AND KEEPING PEOPLE IN REAL JOBS. **SO SUPPORT YOUR LOCAL AUSSIE MADE PRODUCTS.**



Describe your business.

We make MAXTRAX, the original 4WD recovery tracks that make recovering a bogged vehicle a safe, simple, quick and easy task, regardless of the user's level of 4WD experience or ability.

Tell us some of the history of your company.

It was while field-checking routes for a 4WD guidebook to North Queensland & Cape York in 2001 that I got bogged on a remote beach, with the tide coming in, and the path that my life would take changed forever. I was traveling alone, as I often still do, and despite having all of the traditional vehicle recovery gear on board, spent six hours recovering the vehicle with a hand winch. Once it was finally on solid ground, I lay sprawled on the beach, covered in black mangrove mud, sunburned, dehydrated, exhausted and covered in sand-fly bites, and I thought to myself "There's got to be an easier way than that!" When I got home from the trip, I started researching alternative solo recovery equipment, but I couldn't find what I wanted, so I started designing my own. Four years of R&D and numerous prototypes later Australian-made MAXTRAX was launched onto the 4WD world, and instantly won 4WD Monthly Magazine's award for Best New Product under \$500. Since then our company has grown from our first year of selling solely on the 4WD show circuit to supplying all of Australia's major outdoor and 4WD retailers, and to distributors and customers all over the world including the Australian, US, and French Militaries; the United Nations, NGO's; mining, energy and exploration companies; government agencies; emergency services departments; lifeguard services, desert racers; 4WD trainers; tour guides and weekend warriors.

Where is the company at now?

We've grown rapidly over the past few years with the boom, both here and abroad, particularly in the USA, of the 4WD/overlanding market. It also amazes me that we're continually signing up new international distributors who tell us that their customers are constantly asking for MAXTRAX by name.

What is your product's unique selling point?

MAXTRAX is a proven, trusted and highly effective Australian-made product moulded from high-grade material that is light, strong and tough, and safe, simple and easy to use. I

THIS MONTH WE TALK TO BRAD MCCARTHY FROM MAXTRAX



created MAXTRAX not because I wanted to start a 4WD-related business but because I wanted quality product that I could rely on when the chips were down.

If you could say only two words about your product or service, what would they be?

'Quality' and 'Effective'.



What makes you different from your competition?

We created the 4WD recovery board category, so the knockoffs have had to compromise their designs to try to avoid infringing our patents. And while our products are made from the highest quality materials available: Australian made, engineering grade, UV-stabilized, reinforced Nylon, that's built to cope with the severe punishment that it frequently receives, the knockoffs use the cheapest stuff they can find and don't seem to care if their products are actually effective or not.



What products are you developing now?

We've recently released the MAXTRAX Xtreme, with replaceable alloy teeth that was designed with feedback from our military customers.



We're also utilising our own extensive real-world 4WD'ing experience to expand our offering by releasing some exciting new recovery products (which should be on the market by the time this article comes out).

Who uses your products?

Our customers include the Australian, US, and French Militaries; the United Nations, NGO's;



mining, energy and exploration companies; government agencies; emergency services departments; lifeguard services, desert racers; 4WD trainers; tour guides and weekend warriors all around the world.

What is your greatest achievement?

Creating a successful Australian family company and brand that's now well-known and respected around the world from a simple idea conceived during an extremely stressful day on a remote north Queensland beach.

WORDS DAN EVERETT

GET THE DROP

THERE'S MORE TO LIFTING AN IFS 4X4 THAN SPRINGS AND SHOCKS. HERE'S THE GRIT AND GREASE OF MAKING YOUR CV JOINTS GO THE DISTANCE.

IT'S NOT surprising that as 4x4 suspension systems are developed to provide improved performance on long-haul trips that it becomes more complicated for those wishing to modify them for better off-road performance. You may have heard the term 'diff drop' before, and this modification is gaining in popularity as a must-have to ensure your 4x4 goes the distance, but there's still a lot of confusion about what it actually is, what it does and whether you need it. After all, isn't decreasing ground clearance a bad thing in an off-road vehicle?

By the end of this yarn you'll be able to decide for yourself if your 4x4 needs a diff drop, but, more importantly, you'll have a solid understanding of the inner workings of your vehicle's driveline.

WHAT'S A CV JOINT?

BEFORE WE get stuck into how to save your CV joints it's important to take a step back and look at what a CV joint actually does, to gain an understanding of the stresses placed on them. Unless you're travelling the country in a prototype Tesla 4x4, your engine is a long way away from the wheels it needs to drive. There's a transfer case and transmission thrown into the mix as well, but the whole lot is joined together by shafts, gears and, in some cases, chains. The problem is none of those things are particularly good at turning corners, or allowing any movement at all, actually.

For a good few thousand years we've been using different variations of a universal joint to do just that; essentially two hinges at 90 degrees





to each other. The specifics are a little more complicated but the idea is all that matters for now. In a straight line the rotation is perfect, but as the angle becomes greater the rotation of the joint causes a sort of pulsing as the hinges fight against each other.

A CV (Constant Velocity) joint aims to fix that pulsing to give smoother drive and a bigger range of operation before the whole lot binds. There's a variety of ways CV joints can achieve this, but the most common arrangement is a combination of a Tripod joint and a Rzeppa joint. The first is three large bearings that go into a matching cup with grooves; their angle of operation isn't real crash hot, but they're there to allow the axle to 'plunge' in and out as the suspension cycles. The Rzeppa joint

is typically found on the wheel side of an axle and is a series of ball bearings inside a cage attached to the driveshaft, with a large cage with matching grooves allowing the angular movement. They allow more angle than a Tripod joint but, as they're constructed of smaller components, these are typically where you'll find a failure.

WHAT KILLS A CV?

AS GREAT as CV joints are, they have their limitations; and unless we all start converting our 4x4s to hydraulic drive, anything we replace CV joints with is going to have similar limitations.

As they run metal on metal, CV joints require lubrication, typically moly grease held in place with a rubber boot. If the boot snags a stick or rubs a hole the

CV failure can be catastrophic, taking out nearby brake lines and ABS wires.



grease can spray out causing premature wear, but that's more of an issue for long-distance travellers or road-going vehicles.

Those 4x4s driven in off-road anger will typically suffer CV joint failure through shock loading, but there are a few modifications that will make those failures more likely. Binding a CV joint is when the joint is pushed past its



maximum working angle and it physically locks up. Steering stops and suspension bump stops somewhat limit this from happening, but having a wheel at full droop and full steering angle will make it susceptible to binding issues. Larger tyres and heavier loads can also amplify the effects of shock loading.

SO WHAT DOES A DIFF DROP DO?

CONTRARY to popular belief, CV joints aren't just an issue on IFS 4x4s; live-axle rigs will typically have them on steering axles to allow the front wheels to pivot. Live-axle CV joints are typically smaller and weaker than IFS offerings, but as they're operating on a smaller angle and only in one direction they tend to hold up better.

The issue with an IFS is the vertical distance between the diff centre and the front hubs. As the diff centre is physically bolted to the chassis there are already huge angles to contend with to get drive down through the suspension and to the front wheels. Lifting the suspension not only increases that angle, it also starts pushing the suspension geometry and the CV joints to their limitations.

A diff drop works by modifying the mounting points of the diff and physically lowering it away from the

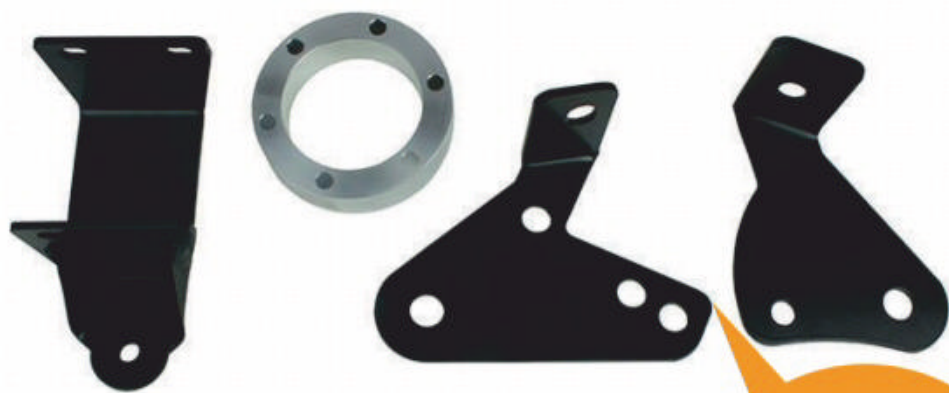
chassis. As the suspension isn't affected the end result is less angle of operation in the CV joints as the diff and hubs are closer in alignment again. It's a relatively simple principal that can easily counter some of the negative effects of lifting your 4x4.

WHAT TYPE OF KIT?

THERE ARE a variety of diff-drop kits on the market and the right one for you isn't necessarily the most expensive, but will depend on what your vehicle needs and what type of driving you do with it. They can typically be grouped into two categories.

Spacer Drop: These are exactly as the name implies; a simple spacer that goes between the existing mount and the frame. They're simple so are reasonably cost effective, but they can't always do the job correctly depending on how the diff is mounted. If they're only able to be used at one end they can physically roll the front diff in its mounts, putting the front driveshaft on an angle. If it's from a competent supplier it's safe to assume it's not an issue in your specific type of 4x4, but eBay jobs are a gamble.

Bracket Drop: These are far more extensive than a simple spacer and typically bear a price accordingly, but they're also typically superior in a few different



Bracket diff drop kits are more extensive than their spacer counterparts but are often better engineered than simple kits.

ways. Firstly, in most cases, they'll be physically stronger than the stock mounts, beefing up the diff housing in the process and reducing flex under load. Secondly, they're typically more comprehensive so can correct all angles. Again, if sourced from a reputable supplier it's a safe assumption it will do the job, whereas cheap offerings could be the bargain of the year or a disaster waiting to happen.

In some vehicles, bracket drops can require cutting of the original mounts which will require certification to be legal, so this should be taken into consideration.

FREE LUNCH

OF COURSE, there's no such thing as a free lunch and lowering your diff centre does come with some drawbacks; although, it's up to you to decide if they're something that'll actually affect you.

The first is you're not actually changing how much angle the CV joints can tolerate, you're just changing where they're happy. Dropping the diff centre 50mm means you can now let your suspension safely droop another 50mm, but also means you'll lose 50mm in compression. If you're running a trophy truck in the Finke Desert Race this may concern you, but for us mortals it won't be an issue as the factory suspension geometry won't cycle that far.

You'll need to factor in either a new or modified bash plate as the change in diff position will most likely foul the diff housing on this.

The other concern is ground clearance. By physically lowering the diff centre 40mm, it's now 40mm closer to the ground. That doesn't mean you'll lose 40mm of clearance, though. The diff centre itself normally not only sits above the bash plate but also above the stock cross-members, sometimes



Ground clearance is minimally affected and is still significantly more than a live-axle rig with similar tyres.

by a good 30mm. By the time you run a modified bash plate the loss in ground clearance can be as little as 20 to 30mm.

WHILE YOU'RE THERE...

WHILE DIFF drops are fantastic, they won't resolve every issue that can arise from a suspension lift. If you're lifting your 4x4 to the point where a diff drop is required, chances are you're not only driving difficult tracks but will also require additional modifications to make things work smoothly.

Replacement of upper control arms is something we've covered and is a near must-have for any IFS lift over 50mm. If you're still breaking CV joints there are other things to consider. The first is modified bump stops to limit suspension travel in either direction. Aftermarket CV joints are also available from companies like Longfield and RCV, and these use stronger materials that allow for increased working angles.

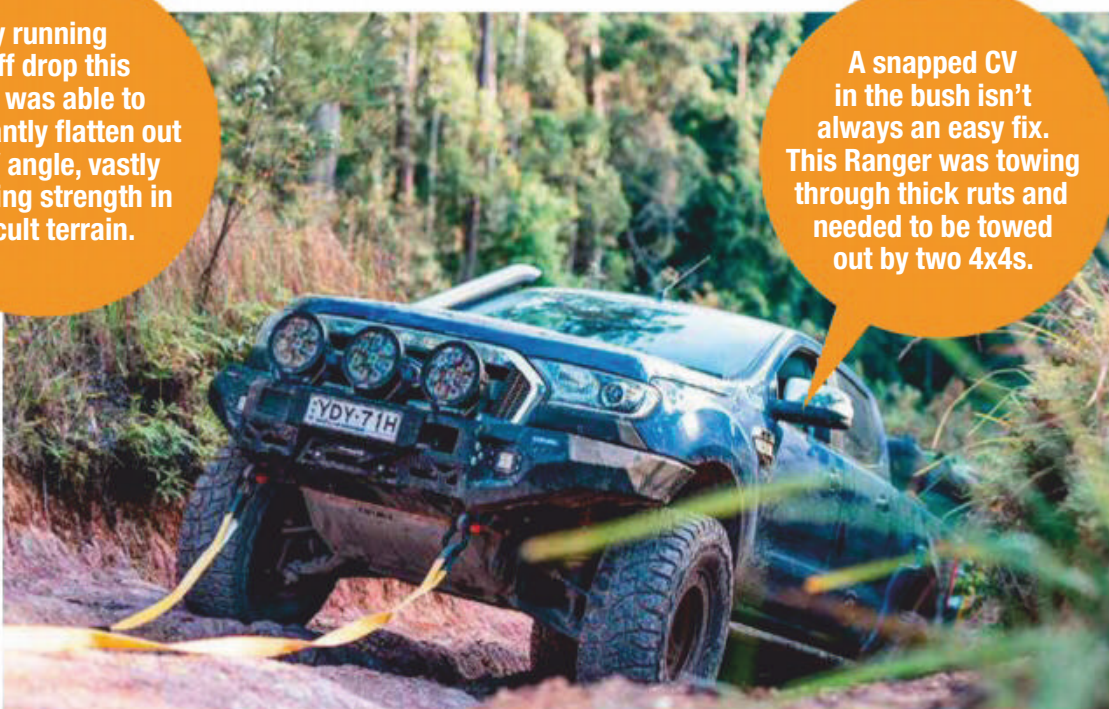
Finally, upgraded diff mounts may be worth considering. If the stock mounts aren't strong enough and allow the diff to flex, it can increase the operating angle of the CV causing it to bind or overextend.

SHOULD YOU DO IT?

YES. If you have an independent 4x4 that's lifted two inches or more, then the positives far outweigh any negatives. You'll gain an increase in driveline strength, more confidence in your drivetrain in difficult terrain, and all for an insignificant loss in ground clearance. Considering an installed price is similar to a set of OEM CVs, a diff drop will pay for itself the first time it saves your backside. **4x4**



By running a diff drop this Hilux was able to significantly flatten out the CV angle, vastly improving strength in difficult terrain.



A snapped CV in the bush isn't always an easy fix. This Ranger was towing through thick ruts and needed to be towed out by two 4x4s.



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AVAILABLE FROM:
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RRP: \$199
WE SAY: Great value with
 an extensive, practical list
 of products.

MENDING WOUNDS

IT'S ONE PIECE OF GEAR WE SHOULD ALL CARRY AND THE ONE WE LEAST WANT TO USE.

WE ALWAYS carry a pretty extensive first-aid kit whenever we are heading bush, whether that's for a day or for a few months. We've had to use them on a few memorable occasions – twice at road accidents we came across and once when a fishing friend of ours caught himself along with a nice barra. We've also used them for a few deep splinters, some knife cuts and a few burns from around a fire or from handling hot camp ovens. In all of those cases a good first-aid kit helps to work wonders.

Our last one was getting a bit tatty after having been ransacked for odds and ends over the years, so we thought it time to get a new one. In amongst the plethora of first-aid kits available on the market, we opted for ARB's large Family First Aid Kit.

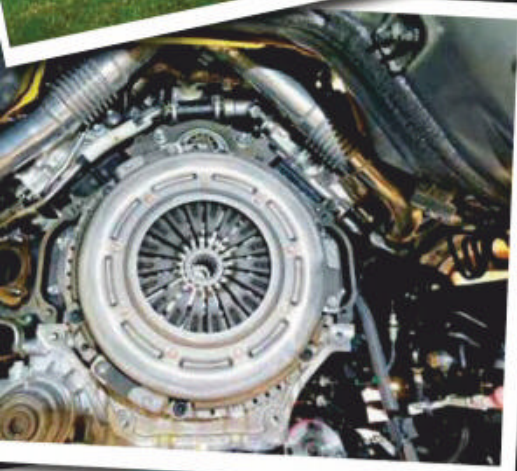
Packed inside the very extensive kit are many different sized wound dressings, conforming bandages, non-adhesive bandages, triangular bandages and adhesive strip bandages, as well as handy items such as a thermal blanket, wound closure strips, burn gel sachets, disposable gloves and even a CPR face shield. In addition, there's an antiseptic spray and even a tube of sunscreen lotion, along with a number of plastic vials of eye wash.

Included in the Family kit is a dedicated 'Snake & Spider Bite' kit (also available as a separate item) as well as an 'Eye Wound' kit,

with all the bandages and necessary fluids to treat a bite or an eye wound. In the case of snake bites, there's a checklist of things to do and not do, like don't try and kill the snake and do not cut the bite site or try to suck the venom out.

The full list of items included in this extensive kit – I prefer to see it as a remote area kit – is too comprehensive to go through here, so check out the website listed above for a full list of items included. As with all first-aid kits you'll probably add some things that you feel are important, including your own personal medication. In addition, we've also added some 'ZipStitch' wound closures (as far as we know only available from the USA) along with a flexible universal 'Sam Splint', which helps support and immobilise broken bones.

Plus, if you've forgotten your first-aid training there are a couple of brief reminder cards included in the main kit on what to do in an emergency, and to remind you of your DRSABCD Action Plan. If you don't know what DRSABCD stands for, then you really need to do a first-aid course. Even if you have done a first-aid course but it's been more than a couple of years, then you'd better check out what's around – you'll be surprised at what has changed and what you'll learn. You never know ... the lives you save may well be those closest to you! Start here: www.stjohn.org.au **4x4**



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READERS' RIGS

NEAT NISSAN PATROL HAS FRASER ISLAND'S SOFT SAND ON ITS RADAR.



4X4 ACCESSORIES

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RYAN JACOBSEN

NISSAN TD42T GU PATROL

Modifications include Cross Country Ultimate Intercooler, ARB bullbar, Kaymar rear bar, front and rear ARB air lockers, rear drawer system, Radius Fabrications stainless-steel snorkel, three-inch Tough Dog lift, three-inch exhaust, ARB Aluminium Series roof rack, awning, ARB long-range tank, Micks HID headlights, and a GMW UHF ... that's just off the top of my head. By far the best place I've taken it is Fraser Island. I love a good Double Island trip as well.



FRASER COLLINS

1998 GU PATROL

Kit includes 2004 GU 4.2 motor; UFI 18g turbo, pump and fan hub kit; six-inch Dobinsons coils (soon to be Fox shocks); rear drawers; FG XR6 seat conversion; 37-inch tyres; rear ARB locker; ARB Deluxe front bar; and an Outback 4x4 rear bar. The best place I've taken it to is the Flinders Ranges.



MATTHEW LILLEY

1991 LC80 SAHARA

It has a reconditioned 1HD-T, high-flow turbo, top-mount intercooler, brake calliper upgrade to later model, rebuilt pump, three-inch straight-through exhaust, reinforced diffs with solid spacers, and 33-inch muddies and ATs. It's been to the Vic High Country, the Pyrenees ranges and tracks including Old Bluff, Oodnadatta Track and Mereenie Loop. It has gone everywhere I have pointed it!

WIN THIS!



4X4 ACCESSORIES



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SEND IN your pics and you could win an ARB High Output Air Compressor valued at \$335. Constructed entirely of lightweight, high-grade materials, the ARB High Output Air Compressor has a class-leading flow rate. Designed for Air Locker activation, fast tyre inflation and a range of other functions.



PETER COLTHUP

WRANGLER RUBICON

Mods include four-inch Dobinsons Flexi coils, Bilstein 5100 shocks, Nitto Trail Grapplers, High Steer conversion, Synergy drag link, TeraFlex Monster trackbar, sector shaft brace, longer brake lines and swaybar links, front control arm drop brackets, and a RackPRO bike carrier. The best places would be in and around the Burdekin River, as well as Vinegar Hill.

RYAN BOLTON-TURNER

HOLDEN RODEO

I've had it for about a year now and fell in love with it as soon as I bought it. It has an ARB bullbar off a Holden Jackaroo with custom mounts housing eight-inch spotties and HID headlights, a snorkel, roof racks, a Kings awning, custom-made sports bar with rear-facing rock lights, two-inch extended shackles with T-bars wound up, Raptor-coated flares, and 31-inch Falken Wildpeaks. The best place I have taken the little 'Deo to is Fraser for a week for schoolies last year. It shows you don't need big, done-up rigs to get to the places you want to go.



DANIEL TADIJA

2003 NISSAN PATROL

With 33s, a Kings rooftop tent, a two-inch lift and an Opposite Lock bullbar, it's taken me everywhere I want it to go.





HEAD FOR THE HILLS

THE RANGER GETS LOADED UP TO SERVE AS SUPPORT VEHICLE FOR A TRIP TO THE VICTORIAN HIGH COUNTRY.

WITH ITS new Rola Titan roof racks, X-Bar and Provent catch can recently fitted, it was time to load up the Ranger and head bush again. Just a local trip this time, up into the Victorian High Country as the support vehicle for our 4X40TY testing, but it was the first time out with the AMVE body loaded up.

GT was using the Ranger for camp catering, so it was carrying all the food, drinks, water and cooking kit to keep 11 blokes fed and watered for a week. This included 30-odd litres of water in the AMVE water tanks and a myCOOLMAN fridge full of beers. It also had all the recovery gear onboard in case any of the new cars got stuck in the hills.

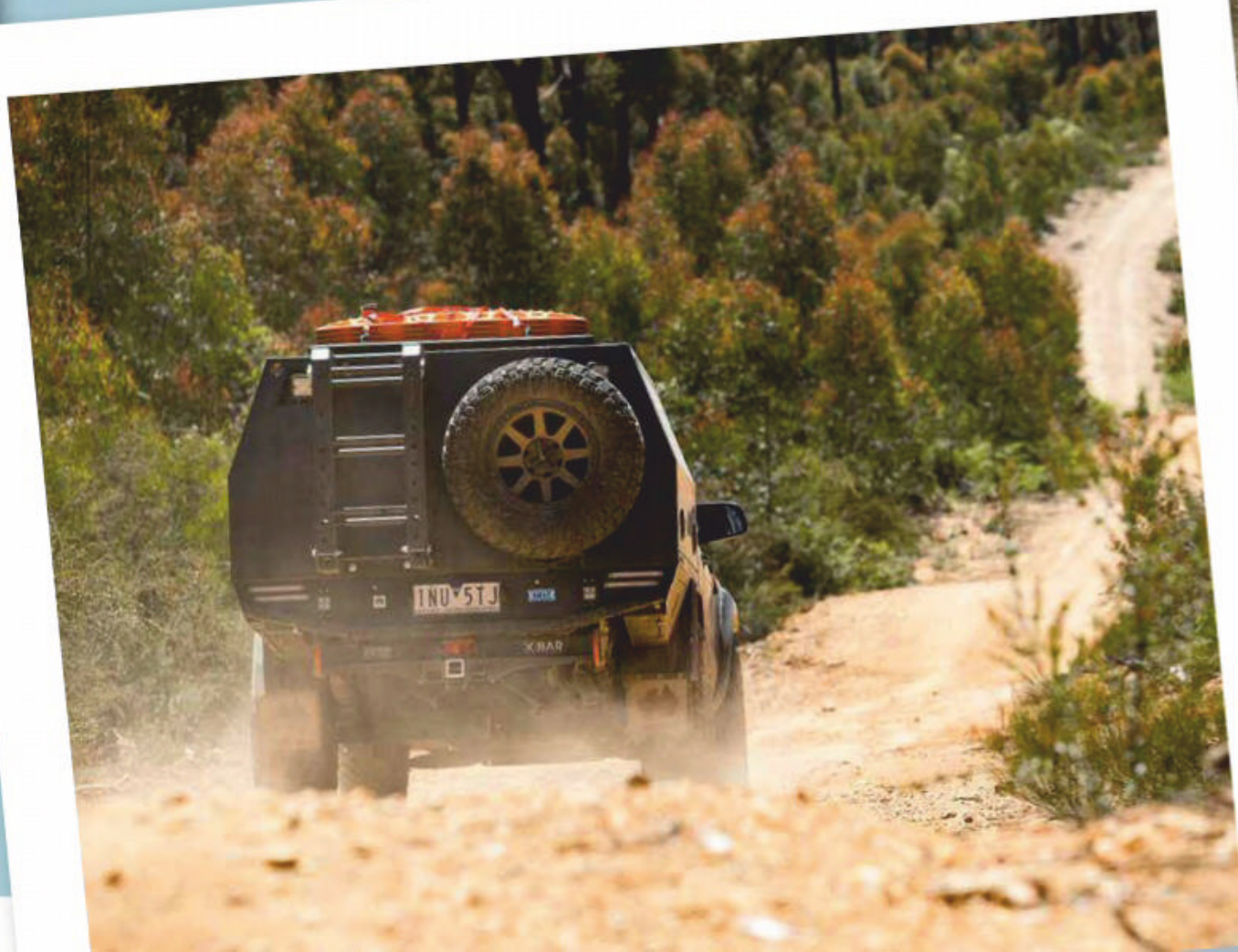
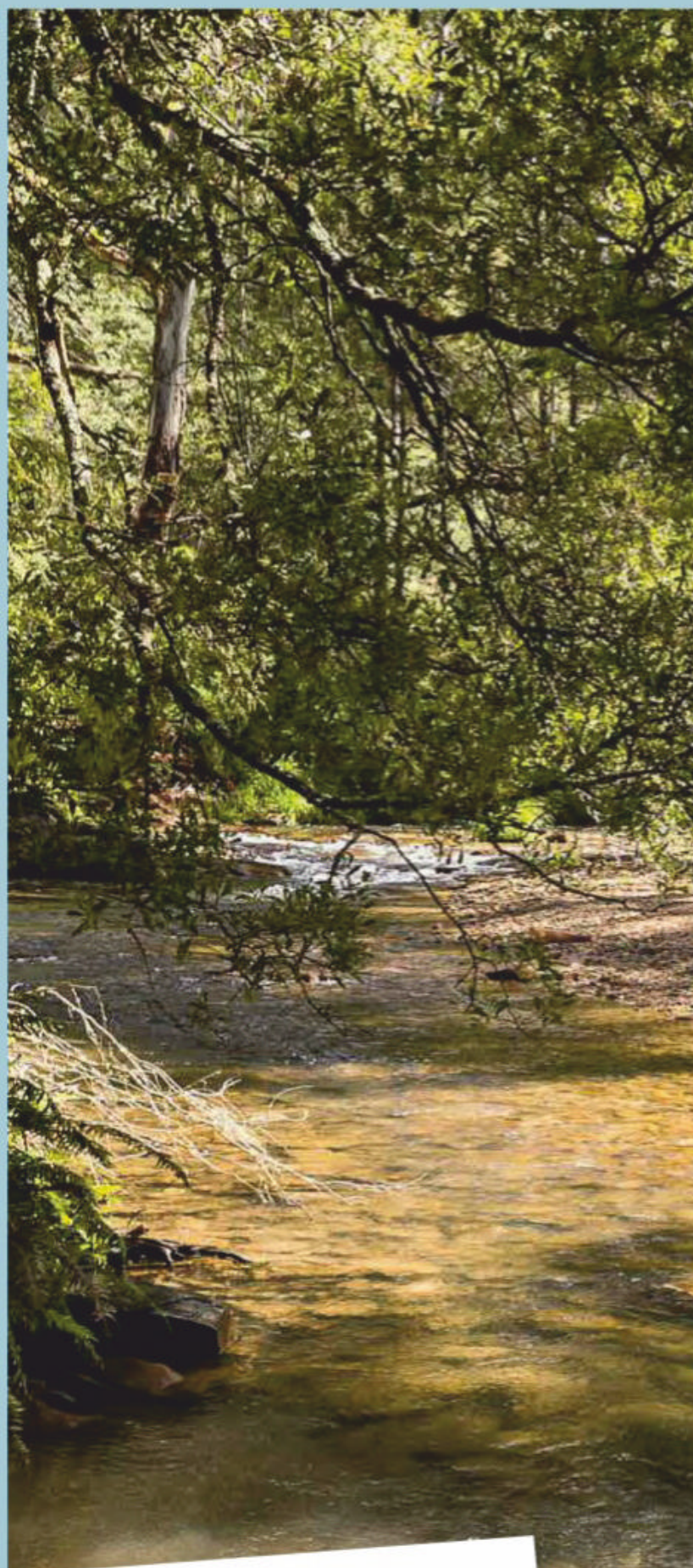
When we originally fitted the Ironman 4x4 suspension to the Ranger, the guys used relatively soft rear springs commensurate with the types of load we'd be carrying. We knew then that the

AMVE body would be a few months off and didn't want the Ranger to ride too hard, and we planned to fit stiffer springs once the body was fitted.

When the body went on and we drove the car to Coffs Harbour we liked the supple ride. The weight of the canopy didn't seem to affect the suspension adversely, either, but now with the canopy loaded, the rear leaves were almost flat and it wallowed a bit when up in the mountains ... time for those stiffer rear leaves in the New Year.

The Ranger chugged along at the back of the new-car convoy for a week without any dramas. We did bust off the power plug for the fridge when sliding it out on the MSA Drop Slide and this shorted out the Redarc unit, but nothing that can't be fixed. We want to wire the fridge power directly into the RedVision unit anyway, along with a few other new accessories to be fitted before the next jaunt. **4x4**

The myCOOLMAN fridge had the most important job on the trip – it kept the beer cold!



A black Ford Ranger 4x4 is shown driving through a shallow river, splashing water. The vehicle is equipped with a roof rack carrying orange gear, a bull bar with auxiliary lights, and a canopy. The background is a dense forest with tall, thin trees and lush greenery.

**THE RANGER WAS CARRYING ALL THE FOOD,
DRINKS AND COOKING KIT TO KEEP 11
BLOKES FED AND WATERED FOR A WEEK**

THANKS TO

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www.mycoolman.com.au



4X4 SHED

1988 LAND ROVER
110 PERENTIE110694⁹ KM

DATE ACQUIRED: FEB 2017

PRICE: \$7700

KM SINCE LAST UPDATE: 720KM

AV FUEL: N/A

OILY MORNING COFFEE

MESSING WITH WOODY'S MORNING COFFEE IS ONE STEP TOO FAR.

CAFFEINE is the capital letter, comma and full stop to my daily grind. At risk of sounding like a complete tosser, I even go bush with freshly ground coffee and a pneumatic espresso machine. So it's kind of fitting that coffee was involved in the diagnosis of my latest Land Rover ailment.

A rarely touted feature of the Land Rover Perentie is the Steyr rifle butt cutouts between the front seats. They actually make excellent coffee cup holders as they are deep enough to stop lateral movement as well as being angled back to prevent my freshly brewed latte from pitching forward into the footwell.

After finding the lower half of my morning-commute coffee soaked in transmission fluid while winding my way to work, it became immediately clear that I needed a new rear output shaft seal. You see, the rifle butt cutouts have little drain holes; so while the Perentie's handbrake drum had filled with transmission fluid which was now being sprayed around the underside of Landy in a fine mist as the tailshaft rotated, this fluid was now seeping up through the drain holes and consequently

desecrating my morning brew.

Cue Land Rover oil-leak jokes...

I considered tackling this job myself, except a couple of factors came into play. One, my tool kit is pretty much made up of the kind of cheap crappy tools that have a habit of rounding off/and or splitting when used in a harsh manner. Second, this truck spends a lot of time at the beach, and even with a lot of diligent Lanotec-ing, stuff underneath has a habit of rusting into place. Those two factors alone would've probably seen me with broken knuckles and buggered spanners.

So back out to MR Automotive at Redcliffe my Landy went. And while I was at it, I thought I'd complete the Maxidrive axle upgrade process I'd started last year. The fact that I've been wrestling with some wiring issues and currently had no windscreen wipers or headlights didn't rate a thought. You can't put 35-inch tyres on wiper arms! It's a matter of priorities.


The wiper and wiring issues are most likely a result of me taking the truck for an unplanned dunk in a lagoon on Moreton Island last year. The resulting bow wave rolled up the windscreen,

through the bulkhead vents and saw my wife and I driving down the beach with both doors open to drain out the gallons of brackish swamp water and reeds. Yep, she's a keeper. The wiper motor is probably now a solid block of rust.

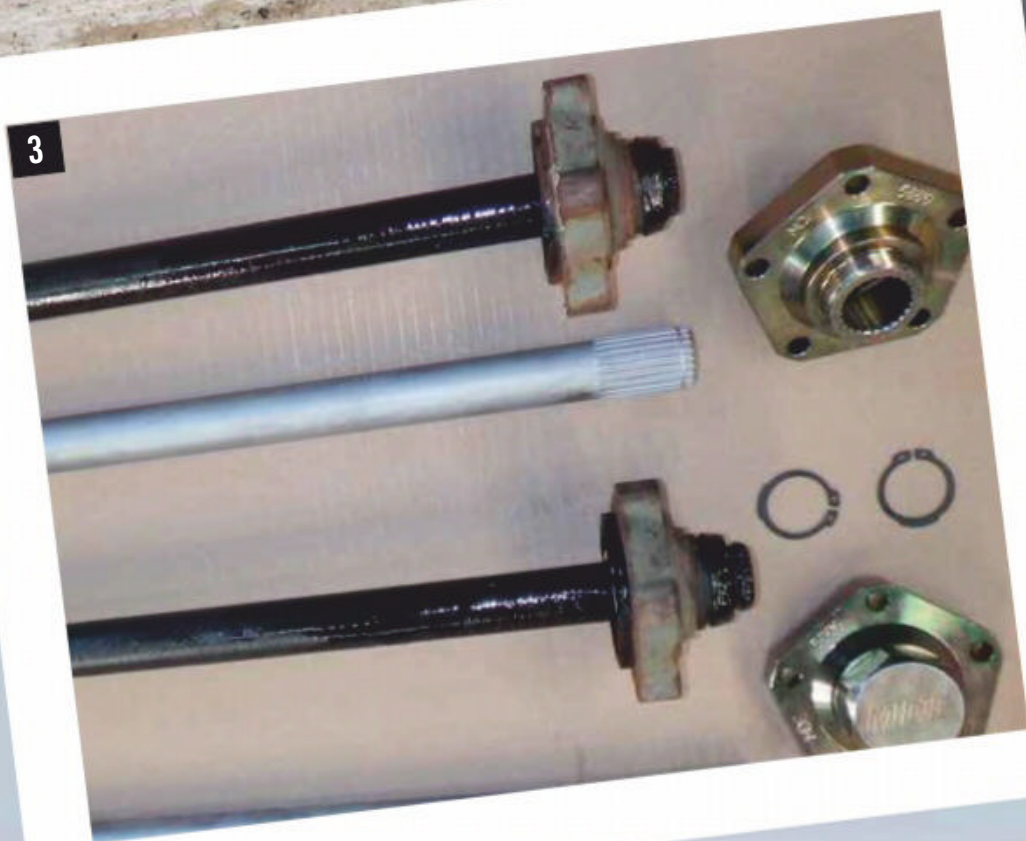
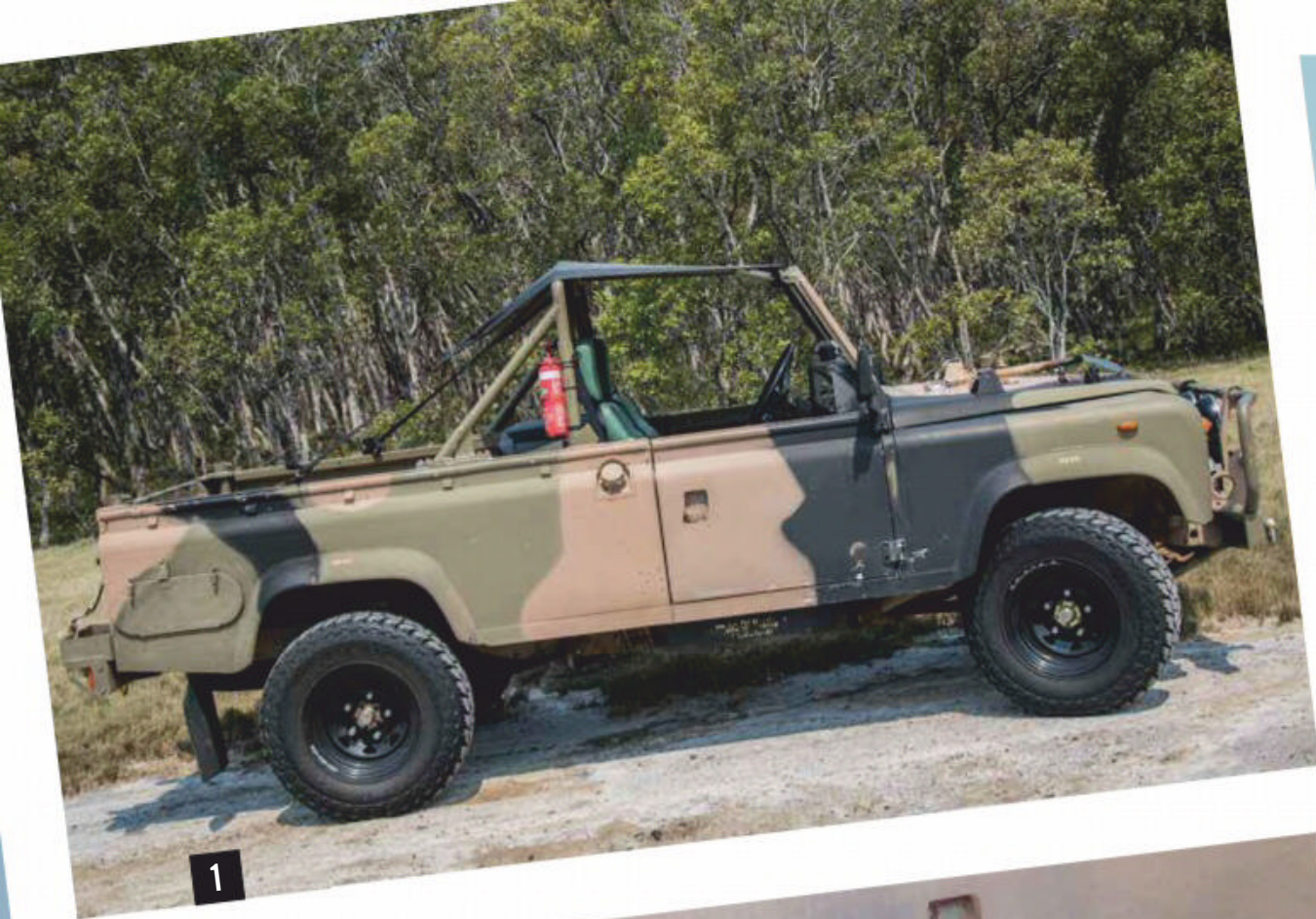
I thought my headlight issue was a burnt-out light switch, but once replaced I still had no low-beam lights. I have a long and not-so-proud history of throwing parts at problems before being forced to use my noggin. I may have to dig out the multimeter on this one.

But, hey, I've now got heavy-duty axles front and rear along with heavy-duty drive flanges and oil bath hubs all 'round. And the plan is to eventually go for 35s because ... well, just because.

The 31-inch Mickey Thompson MTZ P3s the Perentie is currently sitting on are wearing pretty well and are a great choice for beach driving, though for an all-terrain they do have a definite off-road bias (noise, on-road traction etc.). They suit me down to the ground, so the new shoes may be a while off yet.

I've now got to get my butt into gear and fix all the small stuff, as we've got a trip planned. Busted knuckles ahead. 





1. Oil bath hubs, heavy-duty drive flanges and axles rated 150-per-cent stronger than stock.
2. The ADF issue Steyr rifle butt holders make for excellent cupholders.
3. Out with the old, in with the new. Landy axles are notorious for letting go.





4X4 SHED

LAND ROVER
DEFENDER 300TDI250163⁹ KM

DATE ACQUIRED: FEB 2017

PRICE: \$10,000

KM SINCE LAST UPDATE: 4363KM

AV FUEL: 10.2L/100KM



HOT STUFF

MORE TRAVELS, MORE REPAIRS.

THE ADVANTAGE of having two toys in the shed is that when one doesn't start you can drive the other one. Having said this, my Defender has never let me down (knock on wood) but it does seem to spend an inordinate amount of time in workshops having bits and pieces repaired or replaced, so it's lucky I have my ever-reliable Series IIA shorty to get around in when I need it.

Of course, constant maintenance is one of the tradeoffs of owning an older vehicle instead of a newer one. And while it might cost a fair bit of dough to keep the ol' Defender on the road, it's still more affordable than the repayments would be on a new 4x4 wagon.

So, what are the latest Landy trials and tribulations? You may recall I recently spent a wad of cash having the injector pump overhauled. Once this was sorted the lift pump started leaking, so this was replaced at the next service interval. Everything went well for the next couple of months, but then I noticed the temperature gauge climbing towards the red zone on a freeway run to Marulan. I backed off and it dropped back down, but whenever I tried to nudge it up to the 110km/h mark the temperature gauge would correspondingly nudge its way up to the red mark.

It was at Marulan that I got to drive the Defender on a racetrack, using it to ferry photographer Phil Cooper around the

Pheasant Wood circuit for *4X4 Australia's* mud-terrain tyre test. This was bloody great fun, but, suffice to say, I won't be entering the Defender into a race anytime soon.

The next big drive was up to Coffs Harbour for the *4X4 Australia* advertiser's weekend, and on the freeway drive north the temp gauge also headed north. I subjected the Defender to two solid days of pretty gnarly off-road driving in the Coffs hinterland, and this proved no problem for the cooling system at all. In fact, I had an absolute ball, with the Defender's long-travel suspension, front and rear air lockers, great low-range gearing and pre-dinged panels combining to make light work of the tricky tracks. But when I

LONG-TRAVEL SUSPENSION, FRONT AND REAR AIR LOCKERS AND GREAT LOW-RANGE GEARING COMBINED TO MAKE LIGHT WORK OF THE TRACKS

jumped back on the freeway for the drive south, the faded and bent temp needle continued heading the other way.

The boys at Roving Mechanical have since upgraded the tired-looking cooling system, fitting a new copper radiator, a new viscous fan, a new thermostat, and even a new temperature gauge. The result? Nothing much has changed. The next port of call will be to check the vehicle's earth which, if poor, can mess around with the accuracy of the temperature gauge.

Of course, a head gasket could be the culprit, too, but there's no coolant loss and no telltale cloudy engine-oil signs. I hope it's just the earth; I'm not in the mood to spend more money on the Defender right now, because it could prove my old vehicle/new vehicle expenditure comparison to be a falsehood.

On a more positive note, I picked up a Defender cargo barrier the other day for 20 bucks! Winning. 🚙



New copper radiator fitted by the crew at Roving Mechanical.



The Defender prefers dirt over tarmac, like this route in Coffs.



Not quite at home on the Pheasant Wood racetrack near Marulan.



At speeds in excess of 100 clicks, the temp needle heads to the red.

THE SCORE

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THE ESSENTIAL NUMBERS AND PRICES OF EVERY 4X4 ON SALE IN AUSTRALIA



FORD

5-year/unlimited km www.ford.com.au



RANGER

Australian-designed, Thai-built Ranger has quickly earned big off-road cred. Raptor's 2.0L bi-turbo diesel is now optional on Wildtrak and XLT (the big seller for recreational off-landers).

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Single XL c/c	42,490	L5TD/3.2	M6	470	147	1869	1331	3500	80	
Single XL c/c	44,090	L5TD/3.2	A6	470	147	1887	1313	3500	80	
Super XL c/c	44,990	L5TD/3.2	M6	470	147	1933	1267	3500	80	
Super XL c/c	46,590	L5TD/3.2	A6	470	147	1951	1249	3500	80	
Dual XL c/c	46,690	L4TD/2.2	A6	385	118	1938	1262	3500	80	
Dual XL c/c	46,990	L5TD/3.2	M6	470	147	1995	1205	3500	80	
Dual XL c/c	48,590	L5TD/3.2	A6	470	147	2012	1188	3500	80	
Super XL p/u	48,590	L5TD/3.2	A6	470	147	2085	1115	3500	80	
Dual XL p/u	48,090	L4TD/2.2	A6	385	118	2064	1136	3500	80	
Dual XL p/u	48,390	L5TD/3.2	M6	470	147	2118	1082	3500	80	
Dual XL p/u	50,090	L5TD/3.2	A6	470	147	2135	1065	3500	80	
Dual XLS p/u	49,690	L5TD/3.2	M6	470	147	2191	1009	3500	80	
Dual XLS p/u	51,390	L5TD/3.2	A6	470	147	2209	991	3500	80	
Super XLT p/u	56,840	L5TD/3.2	A6	470	147	2178	1022	3500	80	
Super XLT p/u	58,340	L4TD/2.0	A10	500	157	2146	1054	3500	80	
Dual XLT p/u	56,640	L5TD/3.2	M6	470	147	2212	988	3500	80	
Dual XLT p/u	58,190	L5TD/3.2	A6	470	147	2230	970	3500	80	Jul 18
Dual XLT p/u	60,340	L4TD/2.0	A10	500	157	2197	1003	3500	80	Feb 19
Dual Wildtrak	61,490	L5TD/3.2	M6	470	147	2260	940	3500	80	
Dual Wildtrak	62,790	L5TD/3.2	A6	470	147	2278	922	3500	80	Apr 19
Dual Wildtrak	65,190	L4TD/2.0	A10	500	157	2246	954	3500	80	Apr 19
Sport	52,940	L5TD/3.2	M6	470	147	2191	1009	3500	80	
Sport	55,140	L5TD/3.2	A6	470	147	2209	991	3500	80	
Raptor	76,290	L4TD/2.0	A10	500	157	2332	758	2500	80	Nov 19



EVEREST

Ranger-based seven-seater was our *2015 4X4 of the Year*. Midlife update saw 2.0L bi-turbo added.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Ambiente (5s)	54,490	L5TD/3.2	A6	470	143	2370	730	3000	80	
Ambiente (7s)	55,190	L5TD/3.2	A6	470	143	2343	757	3000	80	
Trend (7s)	60,290	L5TD/3.2	A6	470	143	2407	693	3000	80	Aug 17
Trend (7s)	61,790	L4TD/2.0	A10	500	157	2413	687	3100	80	Feb 19
Sport (7s)	62,290	L5TD/3.2	A6	470	143	N/A	N/A	3000	80	
Sport (7s)	63,790	L4TD/2.0	A10	500	157	N/A	N/A	3100	80	
Titanium (7s)	72,590	L4TD/2.0	A10	500	157	2477	623	3100	80	



FOTON

3-year/100,000km www.fotonmotor.com.au



TUNLAND

Foton is a Chinese manufacturer responsible for Tunland Utes; dual-cabs available in no-nonsense specification and powered by a Cummins turbo-diesel.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Standard dual-cab	29,990*	L4TD/2.8	M5	365	130	1951	974	2500	76	
Standard dual-cab	33,990*	L4TD/2.8	A6	365	130	1971	954	2500	76	
Luxury dual-cab	30,990*	L4TD/2.8	M5	365	130	1951	974	2500	76	
Luxury dual-cab	35,490*	L4TD/2.8	A6	365	130	1971	954	2500	76	

*This is a nationwide drive-away price, not a list price, and includes on-roads.



GREAT WALL

5-year/150,000km www.greatwallmotors.com.au



STEED

Great Wall's facelifted version of the the V200/V240 continues the cheap and cheerful theme but gets a new nose, interior and 150mm longer tray.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Single-Cab	19,990*	L4TD/2.0	M6	310	110	1687	1198	1700	70	
Dual-Cab	30,990*	L4TD/2.0	M6	310	110	1900	1020	2000	75	Sum 18

*This is a nationwide drive-away price, not a list price, and includes on-roads.



HAVAL

5-year/100,000km www.haval.com.au



H9

The Chinese-made Haval H9 is a midsize 4x4 from Great Wall's luxury arm. It's a relatively fresh arrival on the Aussie market.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
H9 Lux	41,990*	L4/2.0	A8	350	180	2250	645	2500	80	
H9 Ultra	45,990*	L4/2.0	A8	350	180	2250	645	2500	80	Feb 18

*This is a nationwide drive-away price, not a list price, and includes on-roads.



HOLDEN

5-year/unlimited km www.holden.com.au



COLORADO

Holden's Thai-made Colorado has received a fresh face and new driver-assistance technology as part of a mid-cycle upgrade. MY20 update gets the LSX as a full-time variant.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
LS Single c/c	37,490	L4TD/2.8	M5	440	147	1962	1138	3500	76	
LS Single c/c	39,990	L4TD/2.8	A6	500	147	1959	1141	3500	76	
LS Space c/c	43,190	L4TD/2.8	A6	500	147	1856	1294	3500	76	
LS Crew c/c	43,490	L4TD/2.8	M6	440	147	1927	1223	3500	76	
LS Crew c/c	45,690	L4TD/2.8	A6	500	147	1920	1230	3500	76	
LS Crew p/u	44,990	L4TD/2.8	M6	440	147	2072	1078	3500	76	
LS Crew p/u	47,190	L4TD/2.8	A6	500	147	2065	1085	3500	76	
LSX Crew p/u	46,990	L4TD/2.8	M6	440	147	2110	1040	3500	76	
LSX Crew p/u	49,190	L4TD/2.8	A6	500	147	2103	1047	3500	76	Dec 19
LTZ Space p/u	51,190	L4TD/2.8	A6	500	147	2077	1073	3500	76	
LTZ Crew p/u	50,490	L4TD/2.8	M6	440	147	2144	1006	3500	76	
LTZ Crew p/u	52,690	L4TD/2.8	A6	500	147	2137	1013	3500	76	
LTZ+ Crew p/u	51,520	L4TD/2.8	M6	440	147	2179	971	3500	76	
LTZ+ Crew p/u	53,720	L4TD/2.8	A6	500	147	2172	978	3500	76	
Z71 Crew p/u	54,990	L4TD/2.8	M6	440	147	2170	980	3500	76	
Z71 Crew p/u	57,190	L4TD/2.8	A6	500	147	2163	987	3500	76	
SportsCat V	62,490	L4TD/2.8	M6	440	147	2257	893	3500	76	
SportsCat V	64,690	L4TD/2.8	A6	500	147	2250	900	3500	76	
SportsCat SV	66,790	L4TD/2.8	M6	440	147	2257	893	3500	76	
SportsCat SV	68,990	L4TD/2.8	A6	500	147	2250	900	3500	76	



TRAILBLAZER

Seven-seat wagon based on Colorado sibling refreshed with a new name, new face and technology. Seven pews may make it a family favourite, but touring use is limited to five.

LT	47,990	L4TD/2.8	A6	500	147	2072	678	3000	76	Jan 17
LTZ	52,490	L4TD/2.8	A6	500	147	2203	617	3000	76	Sum 18
Z71	53,490	L4TD/2.8	A6	500	147	2203	617	3000	76	



INFINITI

4-year/100,000km

www.infiniticars.com.au



QX80

Nissan luxury brand's bold-looking, tech-laden version of the Y62 Patrol. Like Y62, no diesel offered.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
QX80	110,900	V8/5.6	A7	560	298	2829	794	3500	100	Sep 18



ISUZU UTE

6-year/150,000km www.isuzuute.com.au





D-MAX

D-MAX shares body architecture with Holden Colorado. Powered by Isuzu's respected 3.0-litre TD that has been tweaked for more torque, plus new six-speed manual and auto transmissions.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
SX Single c/c	38,200	L4TD/3.0	M6	430	130	1736	1314	3500	76	
SX Single c/c	40,300	L4TD/3.0	A6	430	130	1736	1314	3500	76	
SX Space c/c	41,000	L4TD/3.0	M6	430	130	1826	1224	3500	76	
SX Space c/c	43,100	L4TD/3.0	A6	430	130	1826	1224	3500	76	
LS-U Space p/u	48,700	L4TD/3.0	A6	430	130	1981	1069	3500	76	
SX Crew c/c	43,400	L4TD/3.0	M6	430	130	1886	1164	3500	76	
SX Crew c/c	45,500	L4TD/3.0	A6	430	130	1891	1159	3500	76	

SX Crew p/u	44,600	L4TD/3.0	M6	430	130	2016	1034	3500	76	
SX Crew p/u	46,700	L4TD/3.0	A6	430	130	2016	1034	3500	76	
LS-M Crew p/u	46,900	L4TD/3.0	M6	430	130	2001	1049	3500	76	
LS-M Crew p/u	49,000	L4TD/3.0	A6	430	130	2001	1049	3500	76	
LS-U Crew p/u	48,800	L4TD/3.0	M6	430	130	2021	1029	3500	76	
LS-U Crew p/u	50,900	L4TD/3.0	A6	430	130	2021	1029	3500	76	
LS-T Crew p/u	54,800	L4TD/3.0	A6	430	130	2026	1024	3500	76	Apr 19

 MU-X Isuzu's seven-seat wagon based on the D-MAX ute underpinnings, but with a smooth-riding coil-sprung rear suspension. Uses Isuzu's respected 3.0-litre TD engine.										
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
LS-M	50,200	L4TD/3.0	A6	430	130	2092	658	3000	65	
LS-U	52,600	L4TD/3.0	A6	430	130	2142	608	3000	65	Feb 18
LS-T	56,400	L4TD/3.0	A6	430	130	2157	593	3000	65	Aug 18

 JEEP 5-year/unlimited km www.jeep.com.au WRANGLER JL arrived with a new 2.2-litre turbo-diesel and true off-road credentials, but it came with a massive price hike, a one-star ANCAP safety rating and no manual cog-swapper.										
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Sport S (2-door)	48,950	V6/3.6	A8	347	209	1762	551	1497	66	
Sport S (4-door)	53,450	V6/3.6	A8	347	209	1900	560	2495	81	
Overland (2-door)	59,450	V6/3.6	A8	347	209	1762	551	1497	66	
Overland (4-door)	63,950	V6/3.6	A8	347	209	1900	560	2495	81	
Rubicon (4-door)	65,450	V6/3.6	A8	347	209	1992	570	2495	81	Dec 19
Rubicon (4-door)	70,950	L4TD/2.2	A8	450	147	2160	470	2495	81	Nov 19



RANGER REMAINS KING OF 4X4 HILL

THE Ford Ranger remains the king of the hill, with the Blue Oval ute edging out the Hilux and Triton to be the best-selling 4x4 in November 2019. Managing a total of 3218 sales last month, the Ranger outsold the Hilux by 343 units and the Triton by 423 units.

Total sales in Australia's Light Commercial Vehicle (LCV) segment dropped considerably in November this year, when compared to November 2018. Just 19,065 LCV units were sold last month, which is a dramatic 8.8 per cent drop compared to the same month last year. This correlates with the other segments across the board, marking the 20th consecutive month of decreasing sales.

The chief executive of the FCAI, Tony Weber, said the market is tough at the moment, but he remains optimistic.

"The industry has been looking for a lift for some time now and has activated multiple levers to achieve some stimulation, including incentives, sales and special vehicle editions," he said. "However, the appetite for new vehicles remains suppressed."

On the year-to-date sales charts, the Ranger, Hilux and Triton remain the best-selling 4x4s. The Toyota Hilux (4x2/4x4) also remains the best-selling vehicle on the overall monthly charts, shifting a total of 3687 vehicles in November. As always, it's shadowed by the Ford Ranger (4x2/4x4) which registered 3491 sales for the month. The Triton (4x2/4x4) rounded out the top three, with 3123 total sales.




BY THE NUMBERS


Top-selling 4x4s in November 2019
Source: VFACTS


	VEHICLE	UNITS
1	Ford Ranger	3218
2	Toyota Hilux	2875
3	Mitsubishi Triton	2795
4	Toyota Prado	1204
5	Holden Colorado	1055
6	Isuzu D-MAX	1004
7	Toyota LandCruiser wagon	916
8	Nissan Navara	749
9	Toyota LandCruiser PU/CC	725
10	Isuzu MU-X	723
11	Volkswagen Amarok	718
12	Mazda BT-50	467
13	Mitsubishi Pajero Sport	410
14	Ford Everest	372
15	LDV T60	360
16	Mitsubishi Pajero	280
17	RAM 1500	276
18	Holden Trailblazer	236
19	Nissan Patrol	230
20	Toyota Fortuner	215

Top-selling 4x4s so far in 2019
Source: VFACTS

	VEHICLE	UNITS
1	Ford Ranger	33,905
2	Toyota Hilux	33,061
3	Mitsubishi Triton	20,535
4	Toyota Prado	16,945
5	Holden Colorado	14,398
6	Toyota Land Cruiser wagon	12,822
7	Isuzu D-Max	10,382
8	Nissan Navara	9803
9	Toyota Land Cruiser PU/CC	8584
10	Isuzu MU-X	7617


	CHEROKEE									
	The MY19 update for the KL Cherokee – the fourth generation of the series – included a design facelift, modern in-vehicle tech and autonomous emergency braking across the range.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Longitude	41,950	V6/3.2	A9	315	200	1780	678	2200	60	
Limited	46,950	V6/3.2	A9	315	200	1806	652	2200	60	
Trailhawk	48,450	V6/3.2	A9	315	200	1889	605	2200	60	

	GRAND CHEROKEE									
	Jeep's Grand Cherokee runs a grunty Pentastar V6, efficient 3.0TD V6, or the Hemi V8. Quadra-lift air suspension for Limited and Overland, rather than coils. Five seats and tight luggage area.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Laredo	52,950	V6/3.6	A8	347	213	2084	865	2812	93	
Laredo TDV6	57,950	V6/3.0TD	A8	570	184	2267	682	3500	93	
Limited	62,950	V6/3.6	A8	347	213	2169	780	2812	93	
Limited TDV6	67,950	V6/3.0TD	A8	570	184	2281	688	3500	93	
Trailhawk	73,950	V6/3.0TD	A8	570	184	2300	650	3500	93	Feb 18
Overland TDV6	78,450	V6/3.0TD	A8	570	184	2415	534	3500	93	
Summit	84,450	V6/3.0TD	A8	570	184	2327	622	3500	93	
SRT	91,450	V8/6.4	A8	624	344	2289	612	2949	93	
Trackhawk	134,950	V8/6.2	A8	868	522	2399	535	2949	93	



JMC



3-year/100,000km www.jmcmotor.com.au



VIGUS

A low-priced Chinese ute imported and distributed by the local arm of JMC and using proprietary powertrain components from the likes of Mitsubishi and Getrag.

Vigus LX	24,990	L4/2.4	M5	201	95	1880	815	2000	74
Vigus LX	27,990	L4TD/2.4	M5	290	88	1947	823	2000	68
Vigus SLX	30,990	L4TD/2.4	M5	290	88	1947	823	2000	68




LAND ROVER


3-year/100,000km www.landrover.com.au

DISCOVERY


Land Rover ends the naming tradition by calling the 2017 version Discovery, instead of Discovery 5. The TDV6 and eight-speed auto carried over, while a four-cylinder diesel is now offered.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
SD4 S	73,221	L4TD/2.0	A8	430	177	2109	831	3500	77	
SD4 SE	88,421	L4TD/2.0	A8	430	177	2109	831	3500	77	Jul 19
SD4 HSE	100,721	L4TD/2.0	A8	430	177	2109	831	3500	77	
SD4 HSE Luxury	115,021	L4TD/2.0	A8	430	177	2109	831	3500	77	
SDV6 S	85,499	V6TD/3.0	A8	700	225	2236	814	3500	85	
SDV6 SE	99,749	V6TD/3.0	A8	700	225	2236	814	3500	85	
SDV6 Landmark	108,169	V6TD/3.0	A8	700	225	2236	814	3500	85	
SDV6 HSE	112,049	V6TD/3.0	A8	700	225	2236	814	3500	85	Nov 19
SDV6 HSE Luxury	126,399	V6TD/3.0	A8	700	225	2236	814	3500	85	

	RANGE ROVER SPORT									
	New Sport also gets Land Rover's 3.0SDV6 and a revitalised 5.0 V8 and Supercharged V8. The TDV6 is the pick of the range for performance and economy.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Si4 S	97,729	L4TP/2.0	A8	400	221	2027	873	3000	104	Mar 19
Si4 SE	101,029	L4TP/2.0	A8	400	221	2027	873	3000	104	
Si4 PHEV SE	129,559	L4TP/2.0	A8	400	221	2415	785	2500	91	
Si4 PHEV HSE	147,959	L4TP/2.0	A8	400	221	2415	785	2500	91	
V8 HSE Dynamic	173,629	V8SP/5.0	A8	625	386	2252	848	3500	104	
V8 Autobiography	204,929	V8SP/5.0	A8	625	386	2252	848	3500	104	
V8 SVR	238,829	V8SP/5.0	A8	700	423	2239	761	3000	104	
SDV6 SE (183)	108,401	V6TD/3.0	A8	600	183	2159	891	3500	86	
SDV6 SE (225)	117,901	V6TD/3.0	A8	700	225	2159	891	3500	86	
SDV6 HSE	137,701	V6TD/3.0	A8	700	225	2159	891	3500	86	
SDV6 HSE Dyn	144,601	V6TD/3.0	A8	700	225	2159	891	3500	86	
SDV6 Autobio	179,401	V6TD/3.0	A8	700	225	2159	891	3500	86	
SDV8 HSE	150,829	V8TD/4.4	A8	740	250	2344	856	3500	86	
SDV8 HSE Dyn	158,129	V8TD/4.4	A8	740	250	2344	856	3500	86	

	RANGE ROVER									
	Land Rover combines supreme luxury and off-road capability in the Rangie. More power, less weight and better economy are just some of the improvements to the über-roader.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
SDV6 Vogue	196,102	V6TD/3.0	A8	625	202	2328	802	3500	86	
SDV8 Vogue	212,195	V8TD/4.4	A8	740	250	2570	720	3500	86	
SDV8 Vogue SE	230,795	V8TD/4.4	A8	740	250	2570	720	3500	86	
SDV8 Auto SWB	261,310	V8TD/4.4	A8	740	250	2570	720	3500	86	Nov 18
I6 Vogue	201,395	I6TP/3.0	A8	550	294	2342	798	3500	104	
Si4 PHEV	211,925	I4TP/2.0	A8	400	221	2577	633	2500	90	Jul 19
V8 Auto SWB	274,210	V8SP/5.0	A8	625	386	2450	710	3500	104	
V8 SVAuto Dyn SWB	346,170	V8SP/5.0	A8	700	416	2591	569	3500	104	

SDV8 Auto LWB	271,310	V8TD/4.4	A8	740	250	2658	682	3500	86	
SDV8 SVAuto LWB	377,170	V8TD/4.4	A8	740	250	2658	682	3500	86	
V8 Auto LWB	284,410	V8SP/5.0	A8	625	386	2518	682	3500	104	
V8 SVAuto LWB	403,670	V8SP/5.0	A8	700	416	2673	527	3500	104	



LDV



5-year/130,000km

www.ldvautomotive.com.au

T60

Chinese ute brings five-star safety to the budget-priced dual-cab segment.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Pro cab-chassis	28,411	L4TD/2.8	M6	360	110	1720	1255	3000	75	
Pro dual-cab	30,516	L4TD/2.8	M6	360	110	1950	1025	3000	75	
Pro dual-cab	32,621	L4TD/2.8	A6	360	110	1980	995	3000	75	
Luxe dual-cab	34,726	L4TD/2.8	M6	360	110	1995	875	3000	75	
Luxe dual-cab	36,831	L4TD/2.8	A6	360	110	2060	815	3000	75	Sum 17
Trailrider d-c	38,937	L4TD/2.8	M6	360	110	2100	850	3000	75	Aug 19
Trailrider d-c	41,042	L4TD/2.8	A6	360	110	2110	765	3000	75	Oct 19




LEXUS

4-year/100,000km www.lexus.com.au

LX


Take one Land Cruiser 200, give it a nose job, a whopping 5.7-litre petrol V8 and bunch of extra tech gizmos and voila, you have the Lexus LX570.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
LX570	142,431	V8/5.7	A8	530	270	2740	705	3500	138	Sep 18
LX570 S	167,731	V8/5.7	A8	530	270	2740	TBC	3500	138	
LX450 D	135,171	V8/4.5	A6	650	200	2660	TBC	3500	93	Sep 18



MAHINDRA

5-year/unlimited www.mahindra.com.au




PIK-UP

Now has standard airbags and ABS, and recently received a new, more powerful engine. Available in single- and dual-cab configuration with or without a tub. Easy!


	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Single c/c	26,990*	L4TD/2.2	M6	330	103	1780	1370	2500	80	April 18
Dual c/c	29,490*	L4TD/2.2	M6	330	103	1940	1210	2500	80	
Dual p/u	29,990*	L4TD/2.2	M6	330	103	2080	1070	2500	80	
Dual p/u S10	31,990*	L4TD/2.2	M6	330	103	2080	1070	2500	80	Feb 19

*This is a nationwide drive-away price, not a list price, and includes on-roads.



MAZDA


5-year/unlimited km www.mazda.com.au



BT-50


Developed in Australia in tandem with Ford Ranger. Its big attraction is its sharp pricing. Diff lock and low-range TC work great. 3.2-litre only.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Single Cab XT c/c	39,980	L5TD/3.2	M6	470	147	1789	1411	3500	80	
Freestyle XT c/c	44,170	L5TD/3.2	M6	470	147	1857	1343	3500	80	
Freestyle XTR c/c	51,110	L5TD/3.2	M6	470	147	2037	1163	3500	80	
Dual XT c/c	46,010	L5TD/3.2	M6	470	147	1929	1271	3500	80	
Dual XT p/u	45,840	L5TD/3.2	M6	470	147	2044	1156	3500	80	
Dual XT p/u	47,840	L5TD/3.2	A6	470	147	2061	1139	3500	80	
Dual XTR p/u	50,950	L5TD/3.2	M6	470	147	2086	1114	3500	80	
Dual XTR p/u	52,950	L5TD/3.2	A6	470	147	2103	1097	3500	80	
Dual GT p/u	56,830	L5TD/3.2	M6	470	147	2095	1105	3500	80	
Dual GT p/u	58,830	L5TD/3.2	A6	470	147	2112	1088	3500	80	Jul 18
Boss p/u	63,250	L5TD/3.2	A6	470	147	2174	1026	3500	80	



MERCEDES


3-year/200,000km www.mercedes-benz.com.au




GLE-CLASS

The GLE-Class has arrived to take over from the M-Class. Like the M-Class, you need to select the Off-Road Engineering Package to get a dual-range transmission. This is not available on the GLE 63 AMG.


	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
GLE250d	93,900	L4TD/2.1	A9	500	150	2150	800	3265	93	
GLE350d	110,300	V6TD/3.0	A9	620	190	2175	775	3265	93	
GLE500e	131,000	V6/3.0	A9	480	245	2130	770	2000	70	

	X-CLASS									
	Mercedes-Benz entered the dual-cab market with two four-cylinder diesel powerplants: a single-turbo 2.3-litre dubbed X220d, and a bi-turbo 2.3-litre dubbed X250d. The V6-powered X350d soon followed.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
X220d Pure p/u	50,400	I4TD/2.3	M6	403	120	2126	1056	3200	80	
X250d Pure c/c	51,450	I4TD/2.3	M6	450	140	2010	1172	3500	80	
X250d Pure p/u	52,400	I4TD/2.3	M6	450	140	2140	1042	3500	80	
X250d Prog c/c	53,950	I4TD/2.3	M6	450	140	1994	1188	3500	80	
X250d Prog p/u	54,900	I4TD/2.3	M6	450	140	2130	1052	3500	80	Feb 19
X250d Power p/u	61,600	I4TD/2.3	M6	450	140	2155	1027	3500	80	Aug 18
X350d Prog d/c	73,270	V6TD/3.0	A7	550	190	2166	1034	3500	80	
X350d Power d/c	79,415	V6TD/3.0	A7	550	190	2190	1010	3500	80	Apr 19



MITSUBISHI


7-year/150,000km www.mitsubishi-motors.com.au



PAJERO

With all-independent suspension, Pajero has class-leading on-road handling. Effective traction control and rear diff lock make it very handy off-road, too. Sharp base price makes it a great all-rounder.

	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
GLX	53,990	L4TD/3.2	A5	441	141	2302	728	3000	88	
GLS	59,490	L4TD/3.2	A5	441	141	2319	711	3000	88	

	PAJERO SPORT									
	Pajero Sport replaces Challenger in Mitsubishi's 4x4 range. It's still on a Triton ute chassis but with rear coils under the back and bespoke bodywork.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
GLX (5-seat)	46,490	L4TD/2.4	A8	430	133	2045	666	3100	68	
GLS (5-seat)	49,990	L4TD/2.4	A8	430	133	2060	660	3100	68	Mar 17
GLS (7-seat)	50,990	L4TD/2.4	A8	430	133	2105	610	3100	68	



PRICE RISE FOR NAVARA 4X4


NISSAN Australia has jacked up the price of its Navara 4x4, from the base-model single-cab DX all the way up to its dual-cab ST-X Premium. The price changes range from as little as \$300 for the single-cab DX cab-chassis, up to \$500 for a number of variants including the dual-cab ST-X in manual and automatic guise.

The single-cab RX cab-chassis has risen by \$350 to now be priced at \$33,700 (manual) and \$36,200 (auto); as has the King RX, which now costs \$36,200 for the cab-chassis and \$38,000 for the pick-up.


The King ST utes have shot up by \$450, while the King ST-X now asks for an extra \$500. Dual RX cab-chassis and pick-up variants are up by \$400; Dual SL and ST pick-ups by \$450; and, as mentioned, ST-X variants are \$500 dearer.


The Navara 4x4 range utilises the 2.3-litre turbo-diesel engine capable of either 120kW/403Nm or 140kW/450Nm. The N-TREK arrived mid-2019 and remains unchanged at \$56,450 (manual) and \$58,950 (auto).

Black Edition (7-seat)	52,240	L4TD/2.4	A8	430	133	2110	600	3100	68	
Exceed (7-seat)	54,490	L4TD/2.4	A8	430	133	2105	605	3100	68	Aug 18


	TRITON									
	MQ Triton is an evolution rather than a revolution, but has a more torquy and refined engine, better low range and vastly improved fit-and-finish over the superseded MN series.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
GLX Single c/c	32,990	L4TD/2.4	M6	430	133	1660	1235	3000	75	
GLX Single c/c	34,590	L4TD/2.4	A6	430	133	1665	1235	3000	75	
GLX Club c/c	35,490	L4TD/2.4	M6	430	133	1765	1135	3000	75	
GLX Club c/c	38,790	L4TD/2.4	A6	430	133	1765	1135	3000	75	
GLX+ Club c/c	41,490	L4TD/2.4	A6	430	133	1890	1010	3000	75	
GLX Dual c/c	36,240	L4TD/2.4	M6	430	133	1795	1105	3100	75	
GLX ADAS Dual c/c	39,540	L4TD/2.4	A6	430	133	1795	1105	3100	75	
GLX Dual p/u	37,490	L4TD/2.4	M6	430	133	1920	980	3100	75	
GLX Dual p/u	39,990	L4TD/2.4	A6	430	133	1920	980	3100	75	
GLX ADAS Dual p/u	38,290	L4TD/2.4	M6	430	133	1951	949	3100	75	
GLX ADAS Dual p/u	40,790	L4TD/2.4	A6	430	133	1956	944	3100	75	
GLX+ Dual p/u	40,990	L4TD/2.4	M6	430	133	1915	985	3100	75	
GLX+ Dual p/u	43,490	L4TD/2.4	A6	430	133	1915	985	3100	75	
GLS Dual p/u	45,140	L4TD/2.4	M6	430	133	1935	965	3100	75	
GLS Dual p/u	46,990	L4TD/2.4	A6	430	133	1935	965	3100	75	
Premium Dual Cab	52,490	L4TD/2.4	A6	430	133	2042	848	3100	75	May 19

	NISSAN										
	5-year/unlimited km www.nissan.com.au										

	PATROL Y62										
	In a segment that drinks diesel, top-spec Patrol is available in V8-petrol guise only. Fully independent suspension is backed by electronic traction aids. Updated model launched late in 2019.										
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED	
Ti	75,990	V8/5.6	A7	560	298	2754	792	3500	140		
Ti-L	91,990	V8/5.6	A7	560	298	2708	746	3500	140		

	NAVARA D23									
	The D23 Series 2 arrived with a much-needed improvement to the coil-spring rear suspension. Range-topping N-TREK arrived mid-2019 and brought with it a host of black accessories.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Single DX c/c	32,650	L4TD/2.3	M6	403	120	1614	1296	3500	80	
Single RX c/c	33,700	L4TD/2.3	M6	403	120	1626	1284	3500	80	
Single RX c/c	36,200	L4TD/2.3	A7	450	140	1632	1278	3500	80	
King RX c/c	36,200	L4TD/2.3	M6	403	120	1727	1183	3500	80	
King RX p/u	38,000	L4TD/2.3	M6	403	120	1863	1047	3500	80	
King ST p/u	45,100	L4TD/2.3	M6	450	140	1908	1002	3500	80	
King ST p/u	47,600	L4TD/2.3	A7	450	140	1911	999	3500	80	
King ST-X p/u	51,250	L4TD/2.3	M6	450	140	1941	969	3500	80	
King ST-X p/u	53,750	L4TD/2.3	A7	450	140	1944	966	3500	80	
Dual RX c/c	39,250	L4TD/2.3	M6	403	120	1759	1147	3500	80	
Dual RX c/c	41,750	L4TD/2.3	A7	450	140	1780	1130	3500	80	
Dual RX p/u	43,850	L4TD/2.3	A7	450	140	1823	1087	3500	80	
Dual SL p/u	45,050	L4TD/2.3	M6	403	120	1923	987	3500	80	
Dual SL p/u	47,550	L4TD/2.3	A7	450	140	1928	982	3500	80	
Dual ST p/u	47,900	L4TD/2.3	M6	450	140	1862	1048	3500	80	
Dual ST p/u	50,400	L4TD/2.3	A7	450	140	1865	1045	3500	80	
Dual ST-X p/u	53,250	L4TD/2.3	M6	450	140	1917	993	3500	80	
Dual ST-X p/u	55,750	L4TD/2.3	A7	450	140	1921	989	3500	80	Jul 18
N-TREK	56,450	L4TD/2.3	M6	450	140	1987	923	3500	80	
N-TREK	58,950	L4TD/2.3	A7	450	140	1993	917	3500	80	

	SSANGYONG										
	7-year/unlimited km www.ssangyong.com.au										

	MUSSO										
	Thrifty South Korean dual-cab has been reborn with more subdued styling and an unbeatable warranty. XLV variant adds segment-topping tray length to the line-up's killer pricing.										
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED	
EX	\$30,490	L4TD/2.2	M6	420	133	2177	703	3500	75		
EX	\$32,490	L4TD/2.2	A6	420	133	2192	688	3500	75		
ELX	\$35,990	L4TD/2.2	A6	420	133	2192	688	3500	75	Jan 19	
Ultimate	\$39,990	L4TD/2.2	A6	420	133	2192	688	3500	75		
ELX XLV	\$33,990	L4TD/2.2	M6	420	133	2160	1025	3500	75	Jul 19	
ELX XLV	\$35,990	L4TD/2.2	A6	420	133	2170	1025	3500	75	Jul 19	
Ultimate XLV	\$39,990	L4TD/2.2	A6	420	133	2170	880	3500	75		
Ultimate+ XLV	\$43,990	L4TD/2.2	A6	420	133	2170	880	3500	75	Jul 19	

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	REXTON									
	After a two-year hiatus, the South Korean manufacturer launched its two-prong attack on the 4x4 wagon market. The family rig is loaded with kit and comes with a lean price tag.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
ELX	46,990	L4TD/2.2	A7	420	133	2233	727	3500	70	Feb 19
Ultimate	52,990*	L4TD/2.2	A7	420	133	2233	727	3500	70	

	SUZUKI 3-year/100,000km www.suzuki.com.au									
	JIMNY									
	Pint-sized cult classic returns in fourth-gen guise. Live axles front and rear and retro styling means it will remain a favourite on the off-road scene.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
3-door Hardtop	23,990*	L4/1.5	M5	130	75	1095	340	1300	40	Apr 19
3-door Hardtop	25,990*	L4/1.5	A4	130	75	1110	325	1300	40	May 19

*This is a nationwide drive-away price, not a list price, and includes on-roads.

	GRAND VITARA									
	The Grand Vitara gets naturally aspirated inline-four to complement its off-road capability. The last of the smaller dual-range wagons, but is showing its age.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING*	FUEL	LAST TESTED
Navigator	25,990	L4/2.4	M5	225	122	1489	426	1600	55	
Navigator	27,990	L4/2.4	A4	225	122	1504	537	1600	55	
Sport	30,990	L4/2.4	M5	225	122	1605	465	1850	66	
Sport	32,990	L4/2.4	A4	225	122	1620	480	1700	66	

	TATA 4-year/100,000km www.tatamotors.com.au									
	XENON									
	The Xenon is Tata's replacement for the Telcoline and is a tough, budget-buy, Indian-made alternative to the Chinese utes: Foton, Great Wall and now JMC.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Dual-cab p/u	29,990*	L4TD/2.2	A5	320	110	2000	1050	2500	70	

*This is a nationwide drive-away price, not a list price, and includes on-roads.

	TOYOTA 5-year/unlimited km www.toyota.com.au									
	PRADO									
	The 150 Prado has been Australia's best-selling 4x4 wagon for the better part of 10 years. In 2018, a heap of safety features were added to all automatic models, from the base-model GX up to the Kakadu.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
GX	54,090	L4TD/2.8	M6	420	130	2150	835	2500	150	
GX	56,490	L4TD/2.8	A6	450	130	2150	835	3000	150	
GXL	60,690	L4TD/2.8	M6	420	130	2205	785	2500	150	Dec 17
GXL	62,990	L4TD/2.8	A6	450	130	2325	665	3000	150	Nov 18
VX	73,990	L4TD/2.8	A6	450	130	2435	555	3000	150	
Kakadu	84,590	L4TD/2.8	A6	450	130	2435	555	3000	150	Jun 17

	FORTUNER									
	Toyota's Hilux-based seven-seat wagon competes with Everest, Pajero Sport, MU-X and Trailblazer.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
GX	45,965	L4TD/2.8	A6	450	130	2110	640	2800	80	
GXL	50,790	L4TD/2.8	A6	450	130	2110	640	2800	80	Nov 18
Crusade	58,290	L4TD/2.8	A6	450	130	2110	640	2800	80	Jun 17

	LAND CRUISER 200 SERIES									
	With two beaut V8s – petrol and twin-turbo-diesel – the 200 Series Land Cruiser offers loads of performance. Big fuel capacity, big space and big ability make one of the best tourers ever.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
GX TDV8	80,190	V8TD/4.5	A6	650	195	2640	710	3500	138	Jan 12
GXL V8	84,122	V8/4.6	A6	439	228	2555	745	3500	138	
GXL TDV8	91,890	V8TD/4.5	A6	650	195	2630	670	3500	138	Dec 17
VX V8	94,532	V8/4.6	A6	439	228	2610	690	3500	138	
VX TDV8	102,590	V8TD/4.5	A6	650	195	2675	625	3500	138	
Sahara V8	114,872	V8/4.6	A6	439	228	2665	635	3500	138	Sept 14
Sahara TDV8	123,590	V8TD/4.5	A6	650	195	2720	580	3500	138	

	LAND CRUISER 70									
	The 70 Series Cruiser's torquey TDV8 makes it a load-hauler extraordinaire. Available as long-wheel-base Troopie or five-door, mid-wheelbase wagon.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
TroopCarrier WM	68,990	V8TD/4.5	M5	430	151	2320	980	3500	180	
TroopCarrier GXL	72,190	V8TD/4.5	M5	430	151	2335	965	3500	180	Jun 17
Wagon Workmate	64,990	V8TD/4.5	M5	430	151	2220	780	3500	90	
Wagon GXL	69,090	V8TD/4.5	M5	430	151	2190	810	3500	90	Feb 08

	LAND CRUISER 70 CAB-CHASSIS									
	With its TDV8 powerplant, the Land Cruiser ute is better than ever. Optional Toyota diff locks make it super-capable off-road.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Workmate c/c	65,240	V8TD/4.5	M5	430	151	2045	1003	3500	180	
GX c/c	67,240	V8TD/4.5	M5	430	151	2010	1013	3500	180	
GXL c/c	69,240	V8TD/4.5	M5	430	151	2020	1023	3500	180	Dec 07

	LAND CRUISER 79 DOUBLE CAB									
	Tough-as-nails and with room for five, the LC79 dual-cab has the same V8 manual torque and diff-lock option as other 70s to make for an almost unstoppable off-road workhorse.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
Workmate c/c	67,740	V8TD/4.5	M5	430	151	2205	900	3500	130	
GXL c/c	71,740	V8TD/4.5	M5	430	151	2215	900	3500	130	Mar 17

	HILUX									
	The new NG Hilux (built in Thailand) arrived in 2015, with a new 2.8-litre engine, six-speed transmissions and a beefed-up towing capacity.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
W'Mate Single c/c	37,865	L4TD/2.4	M6	400	110	1775	1225	3200	80	
W'Mate Extra c/c	43,465	L4TD/2.4	A6	400	110	1890	1110	3000	80	
W'Mate Dual c/c	45,365	L4TD/2.4	A6	400	110	1915	1085	3000	80	
W'Mate Dual p/u	44,865	L4TD/2.4	M6	400	110	2045	955	3200	80	
W'Mate Dual p/u	46,865	L4TD/2.4	A6	400	110	2045	955	3000	80	
SR Single c/c	40,285	L4TD/2.8	M6	420	130	1795	1205	3500	80	
SR Single c/c	42,285	L4TD/2.8	A6	450	130	1795	1205	3200	80	
SR Extra c/c	43,865	L4TD/2.8	M6	420	130	1890	1110	3500	80	
SR Extra c/c	45,865	L4TD/2.8	A6	450	130	1895	1155	3200	80	
SR Dual c/c	46,015	L4TD/2.8	M6	420	130	1955	1045	3500	80	
SR Dual c/c	48,015	L4TD/2.8	A6	450	130	1955	1045	3200	80	
SR Dual p/u	47,515	L4TD/2.8	M6	420	130	2050	950	3500	80	
SR Dual p/u	49,515	L4TD/2.8	A6	450	130	2045	955	3200	80	
SR5 Extra p/u	55,240	L4TD/2.8	A6	450	130	2045	1005	3200	80	
SR5 Dual p/u	55,240	L4TD/2.8	M6	420	130	2040	960	3500	80	
SR5 Dual p/u	57,240	L4TD/2.8	A6	450	130	2045	955	3200	80	
Rogue Dual p/u	62,490	L4TD/2.8	A6	450	130	2174	826	3200	80	
Rugged Dual p/u	55,865	L4TD/2.8	M6	420	130	2238	762	3500	80	
Rugged Dual p/u	57,865	L4TD/2.8	A6	450	130	2238	762	3200	80	Aug 18
Rugged X Dual p/u	62,490	L4TD/2.8	M6	420	130	2252	748	3500	80	
Rugged X Dual p/u	64,490	L4TD/2.8	A6	450	130	2252	748	3200	80	Jun 18

	VOLKSWAGEN 5-year/unlimited km www.volkswagen.com.au									
	AMAROK									
	Amarok is an impressive all-rounder with two Ute Of The Year wins. Bi-turbo engine punches above its weight and is very economical. TDV6 is a powerhouse.									
	PRICE	ENGINE	TRANS	TORQUE	POWER	WEIGHT	LOAD	TOWING	FUEL	LAST TESTED
TDI400 Core c/c	43,090	L4TD/2.0	M6	400	132	1865	1018	3000	80	
TDI400 Core	44,590	L4TD/2.0	M6	400	132	1873	1018	3000	80	
TDI420 Core c/c	46,090	L4TD/2.0	A8	420	132	1865	1018	3000	80	
TDI420 Core	47,590	L4TD/2.0	A8	420	132	1873	1018	3000	80	
TDI420 Core Plus	51,590	L4TD/2.0	A8	420	132	1978	988	3000	80	Aug 18
TDI550 Core	52,590	V6TD/3.0	A8	550	165	2091	989	3000	80	Feb 19
Sportline 550 V6	56,590	V6TD/3.0	A8	550	165	2078	1002	3500	80	Jul 18
Highline 550 V6	61,090	V6TD/3.0	A8	550	165	2169	911	3500	80	Oct 17
Ultimate 550 V6	68,490	V6TD/3.0	A8	550	165	2216	864	3500	80	Feb 17
Ultimate 580 V6	72,790	V6TD/3.0	A8	580	190	2196	884	3500	80	Apr 19

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